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ABSTRACT

The report contains the proceedings of the Third Annual Northern Virginia Conference on Gifted/Talented Education. Titles and authors of papers presented include "Realizing Your Potential" (H. Lyon), "Developing the Gifts of All Children" (W. Barbe), "What is Leadership Training for the Gifted?" (D. Sisk), "Theoretic Foundations of Differential Education for the Gifted" (V. Ward and others), "Developing Defensible Programs for the Gifted and Talented" (J. Renzulli, L. Smith), "Counseling the Gifted--An Interpersonal Relations Approach" (S. Allan), "Measuring the Progress and Achievement of the Gifted Child" (C. Callahan), "Simulations--Bringing Real Life to the Classroom" (M. Boss), "Project IMPROVE--A System for Identifying Gifted and Talented Students" (J. Renzulli), "Adding a Gifted and Talented Program--Working Out the Change Process" (S. Engel), "Future Studies--Exploring and Creating" (A. Washington), "Evaluating Programs for the Gifted--Some Problems and Procedures" (J. Renzulli, L. Smith), "Middle School Centers for the Gifted/Talented--A Place to Be (E. Pelfrey, T. Camden), "Choices for Children--The Gifted Child in the Regular Classroom" (R. Cramer), "Motivating the Gifted to Want to Learn" (M. Rourke), and "Evaluating Values Clarification (H. Jellen). (DLS)

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Proceedings of the Third Annual Northern Virginia Conference on Gifted/Talented Education

March 3-4, 1978
Stonewall Jackson High School
Manassas, Virginia

Edited by
Jeffrey H. Orloff

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DEDICATION

By 7:00 a.m., Friday, March 3, 1978, a total of five inches of snow had fallen on the beautiful Manassas, Virginia countryside. Certainly a nice day for winter sports, but not the best day to begin holding a two-day conference for people who were attending from as far away as New York and Florida.

The radio was blaring with news of school closings. One school after another was closing its doors due to the poor weather conditions. Roads were slippery and people were asked by police to use the roads only when absolutely necessary.

Many things go through one's mind during moments like this. When you've spent nearly a year planning and organizing a conference of this size, only to find out that it may need to be called off due to a totally unpredictable and unavoidable situation, you wonder if it was all worth it.

IT WAS!

By 7:15 a.m., workshop session presenters and keynote speakers were calling to say, "We'll be there." The Superintendent of Prince William County Public Schools, host of the conference, announced that while all their other forty-four schools would be closed, the school housing the conference would remain open for the entire two days.

By the time the two-day conference was over, 757 parents, teachers and administrators, and every keynote speaker and workshop session leader had participated to make the Third Annual Northern Virginia Conference on Gifted/Talented Education a success.

This book is dedicated to all those who were able to be with us, for they, at least this once, were able to realize their potential.

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J.H.O.

INTRODUCTION

The papers included in this volume have been selected from the keynote addresses and workshop sessions that were presented at the Third Annual Northern Virginia Conference on Gifted/Talented Education held on March 3 & 4, 1978, in Manassas, Virginia.

"Realizing Their Potential" was chosen as the theme of the 1978 conference because of the general feeling that our gifted children, as well as all children, need to realize their full potential--to develop their special talents and gifts.

In "Realizing Your Potential", Harold C. Lyon gives the reader the benefit of his experience of helping people to reach their potential by humanistic methods.

Walter Barbe, in his address, "Developing the Gifts of All Children", speaks of the responsibility that we all have to help develop our gifts. Gifted children need to know, states Barbe, that they "should never have an opportunity to somehow think that because he or she was gifted, he or she was "better than". Dr. Barbe states that these children are "different from" other children and need appropriate activities to help develop their unique gifts.

Dorothy Sisk, the current director of the Office of Gifted and Talented, U. S. Office of Education, explains our national need to help train teachers and ancillary personnel to help provide effective service for education of gifted and talented students.

"Theoretic Foundations of Differential Education for the Gifted" was originally presented at the 46th International Conference of the Council for Exceptional Children in 1968 by its author, Virgil Ward. In his article, Ward addresses the concept of relationships between theory and practice.

Joseph Renzulli, author of the popular "Enrichment Triad Model" explains his model in the article "Developing Defensible Programs for the Gifted and Talented". Included in this volume are two other articles by Renzulli. One of the articles is a discussion of a model for identifying gifted and talented students and the other deals with methods of evaluating programs for the gifted.

A model for measuring the progress and achievement of gifted children is presented by Carolyn Callahan, Included in her article are actual student evaluation forms that can be used by the reader.

In other articles presented, various authors will discuss methods for dealing with the change process that occurs when a school district implements a gifted program, show how simulation activities can be used with gifted students, use an interpersonal relations approach to counsel gifted

youngsters, plan a curriculum for gifted students around the theme of "The Future", present ways to work with gifted children in their regular classroom, discuss a model for the development of a middle school gifted program, show how to help motivate the gifted child and finally, how to use values clarification with the gifted.

Harold C. Lyon, in his keynote address, asks the reader to "sit back and relax". Quoting Gorgi Laznov, Lyon tells us that by doing this, we all can "open up an incredible part of our unused brain capacity and learn very fast". I, like Lyon, would like to ask you to sit back and relax as you read the articles presented here.

Falls Church, Virginia
September, 1978

Jeffrey H. Orloff

I. KEYNOTE ADDRESSES

REALIZING YOUR POTENTIAL

Dr. Harold C. Lyon
Abraham Maslow Professor
Georgetown University
Washington, D. C.

Chairman of the Board of Trustees
The Foundation for Human Gifts, Inc.
Antioch College
Columbia, Maryland

I'm a believer in miracles. St. Augustine said, "Surely he who does not believe in miracles will never participate in one." And advocates for the gifted have to believe in miracles. Certainly to bring this size of a group together to a less than state-wide conference on the gifted on a snowy day like today is somewhat of a miracle. After miracles occur there is always a linear explanation for why they occur. But you have to have a lot of faith and intention to make them come about. All of you have to have it because advocates for the gifted are a minority group in American education. You have to build a mutual support group to help bring off these miracles. Ten years ago I don't think we'd have 40 or 50 people in an auditorium like this for the gifted. Thanks to you and your energies, and your attention, we have this ability to come and work together.

I'd like to invite you to sit back and relax. There's a fellow named Gorgi Laznov from Bulgaria who has worked out a way to teach two years of a foreign language in six weeks. Some of you have probably heard of him. His secret is that he has his students sit back in reclining chairs and relax and try not to learn. They open up an incredible part of their unused brain capacity and they learn very fast. So I'd like to invite you to just sit back and relax.

One of my messages is that to the degree that we can be spontaneous, to the degree that we can respond to one another's energies, we have almost all our potential available. And to the degree that we have a rote, fixed set of responses to life the way we are often conditioned in our school systems, we limit our potential to just a fraction of what it could be. We realize maybe 5 to 15% of our potential in our lifetimes--a tragic waste of what we could have.

We have an ego boundary which is a space around us and when we're inside that space we're safe and secure--when we get out near the edge of it we become anxious. If you go far enough out, you go into a psychotic space. But these boundaries are elastic, and by taking risks you stretch your ego boundaries until you have this very large space in which to roam around. Then there's a long way out to the periphery where you become anxious. And when you stretch these boundaries, you have far more of your potential available. But society tends to encourage us to have very narrow ego boundaries so we'll be predictable. And so we tend to kill off creativity, usually before the fourth grade. Our main job as teachers, students and parents, is to help expand those ego boundaries, to provide a safe space for that risk-taking.

You have an opportunity here, at this gathering, for one full day tomorrow, to share with your colleagues and new friends that you'll make. A day in your life is a precious gift to give. There's never another day exactly like this one--it' unique. So I challenge you to be here and now, to be spontaneous, and to be here, not only with that 15%, but also that other 85% of your potential.

To illustrate that, let me just ask you for a moment to consider that you went to the doctor and he told you that you had only one week left to live. How would you spend those precious seven days? What would you say to those people who are special in your life, if you had only a week to live? You see, those are the very important things that we often neglect to say--that we're embarrassed to say.

Let me suggest that when you leave this conference, that you go back and say and do some of those things that you would if you had only one week left to live. Share some of these things with your students and family, and I predict that a lot more of that potential of yours will be available to you.

Aerodynamic experts have studied the bumblebee and have found that the bumblebee really cannot fly--it's impossible scientifically. His body is too heavy for his small wings. The bumblebee doesn't know that, so he goes ahead and flies anyway. It's these kinds of miracles that we have right there in our classroom, in each gifted child. You can't predict a butterfly from a caterpillar--there's no way you can predict it. You don't see caterpillars running around on logs, leaping off trying hard to fly. They'd never stay still long enough to grow that cocoon, and there's a great difference between doing and being. We need to learn to <u>be</u> along with our great capacity to do. Being is infinite--it's boundless. Doing has limits to it, and we burn out in doing. But in being you can expand to a total context, and that's what the classroom can become with gifted and talented children.

A few years ago before I left the U.S. Office of Education, I was driving to work in Washington in the spring, and seeing a large tulip bed that was donated by the Netherlands that's right across the street from the Tidal Basin. Every spring there's a race for glory between the cherry blossoms and these tulips. And a couple of springs ago I was driving in and I saw twenty or thirty of the tulip blossoms blooming, ahead of the rest in this bed of thousands of green leaves. On my way home that evening I noticed a National Park gardener on his hands and knees clipping off these early blooming blossoms, to keep uniformity in the tulip bed. I thought for a minute that could only happen in the Nixon administration in Washington. And then I realized, "No, it happens everyday in our classrooms when we clip off the blossoms of the early-blooming students--the gifted and talented youngsters--as we try to fit them into our lesson plans in our lockstep system."

You are familiar with the statistics of six or seven years ago when the Commissioner's Report to Congress on the Gifted showed us that fewer than 4% of these youngsters are being adequately served, and that there's a tremendous amount of hostility directed toward them, not only by their peers, but by counselors and teachers as well. The gifted are the ones who ask the threatening questions in the classroom. In our national effort, we've tried to broaden the definition of the gifted to go far beyond just the high IQ youngsters, to include those with leadership ability and those with creativity. Dr. E. Paul Torrance predicts that if you take the top 5% of IQ, you'll miss 70% of the most creative divergent thinkers. We've tried to broaden this definition to include those with creativity, leadership ability, and artistic talent.

At the New Age World Congress in Florence, Italy, Buckminster Fuller talked for three hours a day for five days about his theories and his life, and we talked about the gifted and their importance. We began to change the label of "gifted and talented" children at this Congress and started to call them New Age children. I like the term, not only because there are so many problems with the "gifted and talented" label, but also, by New Age children, we were talking about a broader definition including even those youngsters with intuitive gifts, and those with spiritual gifts. I think that a few years from now we will begin to add

these children to the definition. Buckminster Fuller shared with us that he really deserves little credit for all of his discoveries. He claims that the knowledge is already up there and all you have to do is break loose from institutional ways of thinking to find it. He said he deserves little credit for that, but he does deserve credit for beginning to think for himself forty years ago. In fact, he said that even the slowest child in the classroom has the capacity to be as bright as the brightest. And that the brightest child has the potential to be so far ahead of where we are now that it's almost frightening. We need to begin to free up that incredible potential that we all have.

As you know, the national legislation is quite inadequate. We need to figure out ways to do the job within our states, within our local school systems, with private support as well. One of the things that I have been doing in the year and a half that I've been away from the Office of Education is to try to develop another mechanism for that. We have developed a non-profit foundation called American Excellence. And what we're attempting to do is to create a way to acknowledge excellence in all of its aspects. We feel that at a time when guarantees are not being honored, when cars have to be recalled, when presidents have to be pardoned, when our air, food and water is tainted, that we need to take a new look at the values of excellence that made our country great. We want to create chapters of American Excellence, eventually, throughout the country where the members of the chapters would identify people in their communities--carpenters, mechanics, builders, and teachers, who put excellence into their work and craftmanship--and acknowledge them. Then we want to link them up with gifted children in mentorships.

We will also begin to create, in addition to these mentorships, olympiads of the mind and senses, rather than the athletic variety. Every coach in the country is watching for the athletically gifted and doing a better job of individualizing their instruction then we are doing for all the rest. We want to have creativity games never before played--intellectual games--math, chess, scientific competitions; collaborative leadership exercises where young leaders can sit down and work on real community problems, working with people in leadership positions from the community. We want to have artists and musicians creating a festival of life around the olympiad with art, music and culture. And we want to have "all-win" games where all the competitors play just for the joy of getting to know the other players instead of winning or losing. We want to take this kind of model and develop it and expand it to state-wide olympiads--and eventually, national olympiads. This is an exciting and ambitious project. We're seeking funds from various foundations and private individuals in order to expand and develop American Excellence.

I worked briefly with the White House Task Force on the Gifted in 1968. We went around the country interviewing some of the country's most successful citizens. We asked them what made the biggest difference in their lives. Every one of them had the same answer to that question and that was that some individual--a teacher, coach or some respected adult--had taken off their roles, their rank and their status and built an intimate one-to-one human relationship with that person, encouraging them to take risks, to try new things that they wouldn't have tried, encouraging them to believe in themselves as human beings. That kind of

mentorship is one of the most effective ways to serve the gifted and talented. We need to see how we can develop those within the school system, but perhaps outside the school walls. And you can do it for a relatively low cost. We are going to be attempting to do this through the American Excellence Organization.

Alfred North Whitehead said that after you understand all about the sun, and the stars and the rotation of the earth, you still may miss the radiance of a sunset. Many of our programs for the gifted tend to focus purely on cognitive intellectual development where we push gifted children down an intellectual track with little attention paid to their affective development--to their capacities for love, empathy and awareness, and their communication skills. We need to integrate the affective with the cognitive and this is what I call humanistic education. It's an integration of those two, and when you do that, both kinds of learning will peak and be more indelible.

At the New Age World Congress there was talk about integrating the spiritual aspecs of the child as well. Abraham Maslow said that we need to treasure "the emotional jags of the child in the classroom"--those "peak" experiences, and that's where real learning takes place.

In my own particular life, as I look back over the more important learning experiences I have had, very few of them came from my academic years. Rather they came from crises--from tragedies in my life. The Chinese character for crisis is the very same as the Chinese character for opportunity. So we need to pay attention to those kinds of learning experiences, which are perhaps the spontaneous ones--the ones we don't plan.

What kind of teacher is it that can facilitate this kind of learning? This is a teacher, who I would say, has "natural authority" as opposed to "status authority". Status authority comes from hiding behind a podium and lecturing down to an inferior group of people who you are going to fill up with your superior knowledge. It's not very relevant in the classroom. Natural authority, on the other hand, is earned by sharing in a learning experience with a group of colleagues--the students. This teacher with natural authority brings in all of his or her resources--books, experiences, feelings and friends. How many teachers think of bringing a friend, who may be visiting, into the classroom to share with the class? Friends are so rare. As I get beyond forty, I begin to realize that if I have over five that I can really count on, I'm indeed rich. To bring a friend into your classroom to share with your students can be a peak experience for you as well as for the students. Friends are a resource that you have. The students in the classroom are the most important resource of all. They learn more from one another than they do from the teacher. The teacher who is effective is a good catalyst, a good facilitator who can facilitate that kind of discovery. This is a teacher who doesn't have all the answers. You know, the thing that is beautiful about us is not our perfection but rather our imperfection. That's what makes us human. A human being is not perfect. The hothouse fruits of life, grown in the protective environment of the greenhouse, don't have nearly the flavor of those that are exposed to the wind and the rain and the elements. The same thing is true of people. Who wants a perfect teacher? A perfect teacher is phony. Who wants a perfect wife, a perfect husband, a perfect boss? Those people are not genuine.

Carl Rogers has done what I think is the most significant research in the last couple of decades in terms of the traits of the successful therapist. His colleagues, and in particular Dr. David Aspy, over the last ten years, have done an incredible empirical study, taking Rogers' findings for therapists and applying them to teachers.

Rogers found that there are four traits of the successful therapist, and Aspy collaborated that the very same traits exist in the successful teacher. The first one is the one I just alluded to, and that's genuineness, or realness, on the part of the teacher. The ability to be a human being with strengths and weaknesses, to be genuine with your students. The second trait is what he calls empathic understanding, or the ability to put yourself in the student's shoes. The third trait is prizing, or caring. It's just the opposite of apathy. It's caring enough about the uniqueness of an individual to celebrate that uniqueness. The fourth trait is trust. The student trusts that the teacher is there not to catch them up on all their faults but to facilitate the discovery process. Trust grows largely from the other three traits, I believe.

I add a fifth trait--competence in the subject matter, but it wasn't in the study, and I put it last on the list. It seems to be the only one that we're really training teachers for. It's hard to train people in those other traits. They're the kinds of things you have to discover again through your own growth and peak experiences.

Aspy's follow-up study is most significant. The data showed us that teachers with these traits have higher achievement scores in the classroom. It's the kind of hard-nosed data we have needed to convince administrators and others that we must focus on the education of the whole person.

Aspy found that the governing trait of these four that I listed, is empathy. The teachers with high empathy tended to have the other three traits. And so he studied high empathy teachers and he found that their students had higher achievement scores. They smiled 200% more--so did their students. They tended to have greater influence the earlier the students were exposed to them. First grade students with high empathy teachers achieved a twenty-point IQ differential by the end of the year. And by the end of the second grade, even when there was no control for the high empathy teacher, they went on to gain another 20 points in IQ, just from the effect of that first grade high empathy teacher. So, the earlier, the better. We've known this but we have paid lip service to it.

Aspy also found that it was easier to train elementary school teachers in empathy skills than it was high school teachers, or for that matter, university professors. In fact, he concluded that we ought to have first grade teachers helping university professors learning how to relate better with students. Aspy also found that these teachers tended to have good physical condition and it correlated with high empathy. The cut-off criterion for good physical condition was they would walk or run a mile in 12 minutes or less, which is not very fast. Seventy-year-old joggers are doing it better than that. But 90% of the teachers over age 35 said they could not (I would say they would not) walk or run a mile in 12 minutes or less.

Those teachers that were in good physical condition and high empathy started out the week on Monday at a level of energy and ended up on Friday at a peak level of energy. Those teachers with low empathy and low physical condition ended up exhausted on Friday. So this says something about high empathy teachers, high empathy therapists, high empathy people. I'm sure if you look around at the people you respect, you'll find a lot of them have these four traits.

There is another study that was done by Ren Likert at the University of Michigan, that collaborated, after looking at 5,000 organizations, that the high-producing managers also have these traits. Low-producing managers tended to think of people as tools to get the job done--the high producers think of people as unique individuals.

There are teachers that tend to look inside for inner beauty as opposed to surface beauty. Our whole grading system tends to be kind of a surface beauty orientation rather than inner beauty. In 1968 I suggested to the White House Task Force that we go up to my old alma mater, West Point, and look at the social science department where we happened to have twelve Rhodes scholars on the faculty--an incredible group of gifted people. We went and asked them what made the biggest difference in their lives, and they all had the same answer--that there was a mentor in their lives and they began to name the mentors. Three of them named the same man who ironically also had a great influence on me. He was a person who, again, saw our inner beauty. He tended to have these traits that Rogers talks about. He wasn't worried about our brass being polished or our shoes being shined, but was really looking within for inner beauty instead of focusing on the surface. The whole billion dollar cosmetic industry is based on surface beauty. We need to see deeper than that as we see gifted youngsters.

I'd like to be very personal for a minute and talk about some of these peak kinds of experiences because I think they are so crucial in the lives of gifted children as well as in our own lives. In my own particular background as a West Point ranger/paratrooper (which does come in handy in the Federal bureaucracy, so I don't give up all that I learned there), I later realized that I was limiting myself to such a small amount of my potential.

There was a particular crisis in my life of loneliness. Loneliness is such a taboo emotion in our society. We tend to avoid it at all costs. Gifted youngsters learn that they can have some kind of achievement and not have to face the loneliness until later, but they are all, at times, quite lonely. In my own case, I had never cried for some thirty years of life. On this occasion I was with my two sons. I had just split with my first wife after ten years of marriage and loneliness literally caught up with me. I got beneath this tough, outer, over-achieving kind of shell that I had built around myself--my tough veneer. I found beneath it a kind of a tenderness. Within that tender part of me I found a great deal of my creativity. I wrote a book in a couple of months time, I wrote poetry, I painted, and I had never done these things for some thirty years.

I found a little boy part of me that had grown up fast at age five. I had total recall of being at a train station in Cambridge, Massachusetts. I had never remembered this incident before this experience. I was there with my father who was leaving for World War II and my mother was crying. I was scared and he said, "You're man of the house now. You take care of your Mom. You be good and

I'll hurry home." All of a sudden, at age five, I'm the man of the house. I took that literally. I became the man of the house. I literally leap-frogged over childhood. I'd get into a fight at school (it seemed like every week), and get my nose bloodied, and instead of coming home and climbing into my mother's arms and sharing this bond of loneliness that we both had, I would clean myself up so as not to burden her.

I think often that gifted youngsters who have minds like adults get treated like adults when they are really children emotionally and physically. I found that in this little boy part of me there was a much more likeable, imperfect Hal who was more playful--perhaps more demonic. A few years ago I took out a vendor's license in Washington, D.C. and sold balloons on the Mall on weekends. It was the little boy part of me that always wanted to hold on to a tremendous spread of balloons. I would buy a tank of helium and a few gross of balloons and fill them up, writing sayings on them, like "Love isn't everything, but it sure helps"; and "Nothing lasts"; and "You only get to keep what you let go of". I would give them away to children who didn't have a quarter and sell them for 50¢ to some of my bureaucratic associates. (I was always worried that I would run into my boss, the U. S. Commissioner of Education.) I would come up to some straight-looking person and say, "How about a free balloon?", and he would look a little threatened. I'd say, "Look, it's free. No strings attached but this one." I think it was a grand opening experience for me. I think all graduate students ought to sell balloons once in a while. It was the little boy part of me and a playful creativity that went on to open up other kinds of spaces.

I think that we need to allow gifted children to have that in its rightful place instead of at age thirty-five. But you can still have it at age thirty-five and it's an important part of our potential. I found that this tender part of me, which I always thought was a weakness, was really a strength, and that the tough part of me, which we macho males always think is our real strength, was really my weakness at times. Often we macho males are conditioned to be tough, and it leads to heart attacks at age fifty and ulcers at age forty-five.

We're very poor role models for liberated women. I think the women's liberation movement is so vital. Women deserve equal pay for equal work and equal rights, but I think that for women to give up their inherent tenderness and become tough to try to compete in a so-called "man's world"--a crazy, overly competitive world--is a mistake. If you women would help liberate your men from their toughness, women's liberation might even be enjoyable with tender males by your sides.

There is another part of our potential that seems a little bit radical and that I would just like to talk briefly about, and that's the demonic, the devilish part of us. Rollo May, in his beautiful book, "Love and Will", writes about the demonic. He says that artists understand the demonic, it comes through their work, but we educators don't understand it at all. I think we need to pay attention to those little devils in the classroom, not, perhaps, trying to kill them off as we do, but they don't always need as much concern as the good little boys and girls in the classroom who are parroting just what the teacher wants.

Angels are not very interesting--they are like sexless Western Union people flying about delivering messages. But fallen angels are immediately interesting--like Lucifers. We need to pay attention to the potential energy that is hidden in our demonic.

When I was at West Point, one of the books that somehow failed to get censored out of the library, was one by Robert G. Ingersoll. One day I copied down this glorious quote from him: "If we had done a thousand years ago as the kings told us, we would have all been slaves. If we had done as the priests told us, we would have all been idiots. If we had done as the doctors told us, we would have all been dead. This world has been saved by our disobedience."

There's a lot of potential that comes out in that aliveness that sometimes seems demonic in a gifted child. Nourishing the child's ability to grow from environmental to self-support is what I'm talking about. When you get your approval from all the external sources, the way gifted youngsters often do--overachieving, climbing all the ladders. This is the way I say my role in my childhood--that I had to climb all these ladders to earn the approval, which became a substitute for the love that I never got enough of--none of us do. I began to climb all of those ladders to get approval from outside--external approval. This is the process of therapeutic growth (which is not just formal therapy, but also the process of going through these peak experiences or crises in life). This is a painful trek from where you get your approval from outside sources to where you begin to get it from within yourself, on those rare occasions when you're centered enough instead of being dependent on everyone else for approval. Unfortunately, when that happens to a teacher, he or she usually gets promoted up out of the classroom. When that happens to a person, they no longer are a slave to everyone else's superior idea of how they should be.

It doesn't happen very often, but on those rare moments something else happens to me, for which I have no cognitive explanation. What happens is that I become a mirror. I can feel one of my children, or one of my friends, whomever I'm with, feeling good about themselves, seeing their own beauty in my reflection. It's like the beautiful Leonard Cohen song that Judy Collins sings so well, Suzanne. "There are children in the morning, they are leaning out for love, they will lean that way forever, while Suzanne holds the mirror." This is the mirror in which they can see their own beauty instead of all their faults. The teacher, again, who holds this kind of mirror, is one who can see children instead of looking at them.

I have a psychiatrist friend on the West Coast, Karl Humeston, who built his entire practice on the difference between seeing and looking. He describes looking as a very cognitive head trip where it's mainline from eyes to brain. We sort out and we evaluate. I look at a person out there, their head is droopy, maybe they're going to sleep, and I'm evaluating them. I evaluate children when I look at them, but seeing is a here-and-now "groking" (to use the term from the science fiction novel, Stranger in a Strange Land). It's a sensing process that goes mainline from eyes to heart. Seeing is accepting, right here and now. When we see children and we can be with them instead of doing to them--this being is infinite--boundless.

Another thing that I think has a lot to do with our potential is our varied readiness for learning. Each of our clocks are different. There are morning people and evening people. You morning people are beginning to doze and you evening people are wide awake. We find that when you test a child in the evening who is a morning person, some will score up to 20% lower and vice versa. We need to pay attention to this readiness which is individually unique for each child. The motivation which triggers the readiness needs to come from within the person instead of forced from outside. My old alma mater, West Point, was a great institution for forced learning. We cadets used to say that, "It was a $40,000. education....crammed down our throats nickel by nickel."

In the Office of Education I used to receive phone calls from parents from around the country who wanted to force their two-year old gifted child to learn how to read. And my response was, don't force the child to read, but help him to discover to read the scent of the forest, the smell of the ocean, to read expressions on people's faces, to read body language, and the reading of the words will come as a natural way to express those feelings faster than it would through our linear, lockstep programmed kind of learning. We need to surround these children with highly conscious mentors, highly aware teachers who will play for the longshor that the child will open to the whole universe which is within all of us.

We're on the verge of incredible break-throughs in scientific discovery and levels of awareness and consciousness. The work with porpoises is an example. If you take a porpoise away from a group of porpoises, the remaining porpoises will run into one another for about a month until they build a new energy field. Those energy fields are not unique to porpoises, we all have them. Kirlian photography shows us that we can photograph those energy fields as auras that are different for different individuals. When a child leave the home or goes off to college, the community or family that is left and remaining is a different one and has to adjust to new energy patterns, just as classrooms do.

The work on the DNA and the RNA molecules--this genetic work, is causing us to face incredible moral decisions about whether we should structure the bringing into the world of incredibly bright and gifted individuals. Work in fertilization of the human ova at a certain optimal moment promises the potential for bringing healthier, more aware and more intelligent individuals into society. The work in prenatal care by the LeBoyer method is very exciting in terms of what it means to gifted and talented individuals. African mothers talk to their children in the uterus from the moment of conception on, and when that child is born it is already nine months old instead of starting at the moment of birth. They stimulate that child with songs and even name the child at times. And LeBoyer, with his "Birth Without Violence"--these children that were in his initial group--126 of them--are now 3½ years old. They are incredibly intelligent, free of childhood diseases, and most astonishing, out of 126, 100 of them are ambidextrous--which says something about the damage we do to one-half of the brain during the modern technological birth process.

Joseph Chilton Pierce, who wrote the book, The Magical Child, birthed 100 monkeys, using modern technological birth procedures including the saddle-block. In our modern procedure, where we cut the umbical immediately after birth,

the anesthetic goes right from the mother to the child who needs those lungs to breathe for that first vital moment. Its lungs are incapacitated by the anesthetic, and to compound things further, we cut of a supplementary source of oxygen by cutting the umbical immediately. We douse the child's eyes with silver nitrate in case the mother might happen to have syphilis (which we know she doesn't through tests), and we slap him or her on the rear end --an apt initiation into a tough society which will continue to be tough on them. We put them into a crib and give them a plastic bottle and this child bonds to these material objects.

African mothers that Joseph Chilton Pierce studied, birthed their children naturally in their huts. The mothers put the child on his stomach, and they massage every inch of the child, just as the mother cat licks every bit of the kitten (except for maybe the twelfth or thirteenth kitten in a large litter. When she misses licking the stomach of that kitten it turns out to be spastic). The African mothers instinctively do this. The child can hear the mother's heart beat and then they bite through the umbical (maybe ten minutes later), and put the child to their breast and go out to show it off to their friends. They have eye contact with that child most of its first few months of life. I saw color slides of these children holding up their heads twelve hours after birth, and smiling in a mirror, which our children that have our modern technological birth process, don't do for 2½ months! These children are incredibly intelligent and bright.

An interesting story that Pierce tells is that these children were lined up with their mothers holding them to see the doctor. These little infants with no diapers, and they wondered why weren't the children messing on their mothers. So they asked them, "What do you do when the child has to go to the bathroom?" They answered, "We take them to the bushes." They asked, "How do you know when the child has to go?" They laughed and said, "How do you know when you have to go?" They are so bonded to the child that they sense when the child needs to urinate!

We're finding that the knowledge that our grandmothers had was right, that mother's milk is the most appropriate and vital food for infants. Every minute spent at mother's breast for a small child will be far more significant than all the expensive private schools that you can send a child to later. That nurture, that warmth and the unknown ingredients of mother's milk is most significant. All of these discoveries, some of which are older discoveries which we're rediscovering, offer us new opportunities in terms of gifted children in the next decade.

Dr. Burton White, from Harvard, has found that between 8 and 22 months a child is literally consumed by curiosity. And that that's the period in which the basis for creativity and curiosity is really formed. It's also the time when the child is reaching for everything breakable in the house and the mother is saying, "No! No! No!" and killing off that creativity. Dr. White has discovered ways in which a mother can create child-proof environments which are very stimulating during that crucial period of development for creativity.

So we're on the frontier of incredible break-throughs, the level of which Carlos Casteneda's books just give us a glimpse. Some of them are spiritual. I really believe that the definition of the gifted child ten years from now will include those with intuitive gifts as well. Some time ago, Margaret Mead shared with me that she found gifted children who could hear through two or three stories in an apartment building! She was telling me about one child who frequently had nightmares and was sent unsuccessfully to a psychiatrist for treatment. One night he got up screaming and told about a murder. They later found out that in the apartment building three stories away there was a murder. This child had heard it in detail and even helped solve the crime by giving some of the details to the police. Think of what kind of assault on that child's senses, living in the inner city, would be. We need to pay attention to some of these incredible gifts that we are beginning to see exist in greater percentages that we ever thought--disguised as unexplainable phenomena.

If we could only begin to treat gifted and talented youngsters the way we accept a sunset. The thing that is beautiful about a sunset is its own unique evolution. No one says, "It needs a little more orange in the cloud cover, a little more pink on the left-hand side." We let it evolve in its own unique way. If we could facilitate that kind of evolution for gifted and talented youngsters, then my fantasy for humanistic education and helping to realize their potential would begin to come true.

I wish you all the luck in your very difficult task as a minority group of advocates for the gifted in your schools when you go back. I suggest to you that you build a mutual support group that can help you survive rather than be killed off. The difference that you make makes all the difference in the world in terms of their realizing their potential.

DEVELOPING THE GIFTS OF ALL CHILDREN

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Ladies and gentlemen, I am very happy to be with you. It's a great pleasure to see so many of you again.

I first became interested in the area of the gifted a great many years ago when I was working at Northwestern. When the Quiz Kid Program was on the radio every Sunday afternoon, I was a counselor to some of the Quiz Kids. And, indeed, they were remarkably bright children; that was my first introduction to the whole area of giftedness.

From there I went to Cleveland, Ohio, where the Major Work Program had been in operation since 1922. I had a concern which I think must be the concern of every one of you. Don't you ask yourselves, "But how does this affect these children, not today, but later?" You must wonder that, because as teachers, all the things we try to do and the things we try out, we say, "Yes, but what happens?"

Of course, we have Terman's study to go back to to see what happens to gifted children in later life, but I became concerned about the children who had gone through a program for gifted children in Cleveland, Ohio. And that eventually became my doctoral dissertation. I followed up 456 children, now adults, to find out what kind of benefits there were in this type of education. After working with and investigating those adults who had been given the benefits of the Cleveland gifted program, I became firmly convinced that if we truly believe education is a process designed to provide the maximum development of every individual, then we must believe in special educational opportunities. I mean varied educational opportunities, not better than; different opportunities for children of differing abilities, and that includes recognizing that not all children learn at the same rate or in the same way, and that we must provide special programs for the full learning span.

Fortunately, the emphasis on gifted children is not to see how many isolated facts they can memorize. We know better than that. But I had to know, for myself, that when those children who had been through the Major Work Program in Cleveland were adults, were they the kind of adults that we would hope they would be. I came away firmly convinced they were.

I suspect some of you know of some of the writing I've done about the Major Work Program, but indeed, that's what gave me my life's direction. I believe we have to challenge the gifts of all the children.

They were having a little bit of fun down here in the front row before I came up, and said they were thinking of good hard questions for me. You know, a young man right here in the middle said, "Who is the gifted child?" and I couldn't help but smile because that's such a standard question. Fortunately, after you've been around as long as I have, I know the answer: "Every child is gifted, and if you don't believe me, ask his Mom." Yes, that's the true answer, because if by using the label "gifted" we somehow imply "and the others are not gifted", then we are using a label that is detrimental both to the cause we're supporting, and to other children.

I happen to like the label "gifted" because it means to me that the child did nothing to deserve it. It means the child has a gift that was given to him or her and because he or she has that gift, he or she has certain responsibilities. I would only use the label "gifted" in that manner and I would follow it up with the word "responsibility" so fast that the child would never have an opportunity to somehow think that because she or he was gifted, she or he was "better than." She or he is not "better than", merely "different from." And with the gift goes the responsibility to use it, and indeed, I believe primary grade level is not too early to begin explaining to gifted children what giftedness means.

I had worked in Cleveland, in a metropolitan area, with gifted children, and then had an interesting summer working with a class of rural children in a third grade gifted program. A lot of my preconceived notions about what would work with the gifted and how it would work changed during that summer. We were discussing this concept of giftedness and I said to the class, "Why are you here?" One of them said, "Because my teacher liked me." You see, they were trying so hard to be modest about it. And I said, "Oh, do you mean your teacher did not like the rest of the children?" No, that wasn't what the child meant, either, and after a lot of discussion, one of the other children said, "You know, being gifted is a little bit like getting a Christmas present If you don't unwrap it, it doesn't do you any good." I rather liked that

I'm always a bit concerned about labels like "Honors Program." My concern about it is if it's a gift, and you didn't do anything to deserve it, then why are you being honored for it? I like the label "gifted" because it means it's an ability you have, but until you have used that ability, it's not worth anything to you.

I would encourage children, young people at all levels, to learn responsibility for their gift, whatever the gift may be, Indeed, it is very easy for those of us concerned with school work to think that the best type of gift is the gift of being able to go to school well. And that is a gift. And there are some children who have that gift. But, indeed, let me say to you, it is not the children who know how to go to school well who will necessarily be successful in life. All of us have known many very gifted children, many very talented children, many very creative children, who will do fine in life if they can <u>just</u> make it through school.

I would like to shift for a moment and talk to you about the characteristics, the stereotype characteristics, of the gifted child. Terman's study did us a great service in convincing people that gifted children were not peculiar, that they were not misfits, that they were not bespectacled introverts. He proved all these things were not true. He dispelled that myth. But indeed, what he did was build another myth which I think has been oversold, that the gifted child is a paragon of all virtues. If you look at a list of the characteristics of gifted children, they are healthier, happier, prettier, better adjusted, taller--you can't think of anything positive that the child isn't--and all I can say to you is, "Sounds pretty upper middle-class to me." You know, the stereotyped gifted child is the description of the upper middle-class striving child. And indeed, if we

build our programs only for those children, we're neglecting some of the very children who most need the programs. I fear that too many of our programs are aimed at the children for whom our regular programs are already doing a pretty good job.

If all we include in our gifted programs are the children who are already achieving, who already have a large vocabulary, who already know how to read well, who already love learning, then indeed, we run the risk of missing some and we do not have enough gifted people in our society to discard any of the others. The good gifted program, the right gifted program, has a major concern for all kinds of giftedness. And I don't think that excludes anyone. The very best test of giftedness continues to be intelligent experienced observation. Don't pretend that a child must take a test before the experienced observer knows because it just isn't true.

Frequently, certain gifted children, not the stereotyped ones, know more about the answer than the man who made up the test or asked the questions. For instance, a six year old child was asked to define the word "Mars", and he said, "It's the nearest planet to the earth, god of war, and a verb." Got it? He mars the table--a verb. Six years old--now do you really think anyone must go through two hours more of testing then add up a score and say, "Uh huh, we've got a gifted child." Of course you don't. Children who have those kinds of concepts and understanding, and often vocabulary, too, are gifted. I'm perfectly willing to say that the child who achieves well is gifted. What I'm afraid of is that we then take the next step and say that the child who is not achieving well is not gifted. If our programs are built only on the basis of achievement, then that's essentially what we're saying. I want to build programs for the high achievers, but I want also to build programs for those children who are not high achievers, but who can be.

I want to talk with you for just a few minutes about the philosophy of working with gifted children. If we really believe in the education of all children, then we must be very careful to avoid any notion that we are talking about the education of gifted children at the expense of other children. That is not what we are talking about. We are not talking about educating any kind of intellectual elite. We are talking about good education for all children, and that includes the gifted as well. I so liked Dr. Gardner's line when he said, "We want everyone well-educated, we want well-educated plumbers and philosophers, then both our pipes and our theories will hold water." It's a good line, because that's so true. We're asking for good education for all children, and I believe that's what individualization of instruction is all about. It's recognizing, first of all, how children learn, and then teaching to children through their strengths. What I'm pleading for, of course, is that we stop the concept of education that says we find out what a child cannot do and then work him to death in his weakness. I'm pleading for the reverse of that and that means finding children's strengths, and then through their strengths, helping them overcome their weaknesses.

Let me give you an example. I've said it and I suspect you have, "I have told that child a thousand times." Does that sound familiar? Well, may I suggest that if we teachers have to tell a child something a thousand times, then it is not the child who is a slow learner. Much of education has been from the very negative point of catching someone being wrong. I'm making a plea for catching the child while being right. I'm making a plea for working on his or her strengths. I'm not talking about making him or her a specialist in any one

area. I'm talking about helping that child to be the best person he can be. What better example do we have than ourselves, as adults. Nobody will ever catch us in our weak areas again. We get into the areas where we can succeed. Gifted children are no different from others--they, too, need to have success. This concept that teachers must find what they can't do and then virtually punish them with education, destroys the very thing we most want to do: to give them the joy of learning. You see, for a child given the skills of learning and then the joys of learning, why the world itself can change and she or he's going to keep on learning long after we educators are out of the picture.

And now I'm to that word "involvement" because it is the key to whatever it is we're doing with gifted children, or with any child. The worse thing that can happen to us in teaching is that the kids don't or won't care. So long as they care, and are involved and are reacting and responding to what we're doing, we can even afford to be wrong occasionally and they still learn.

There are children who say to us, "I don't know", when what they mean is, "I don't care." They aren't saying, "I tried to get it and don't know the answer." What they mean is, "I don't care enough to try." The greatest danger we can have is if we think any program for gifted children, average children, or others, can in any way teach children material when either we are not interested or they are not interested. We must find ways to challenge children's interests in learning, and the best way to do that has to be through the use of a model who loves the subject he's teaching, and I'm talking about the teacher. I'm saying that as teachers we desperately need to expand our own backgrounds of knowledge, our information, our love of learning, our reading, whatever it may be. I think we have been too shy with children, we have hesitated to let them know we're human beings. We have not shared with them the things we like and dislike. Gifted children may reject our likes. They're not concerned that if we like a particular thing very much, they have to like it. They may reject it and find other things.

Let me talk now with you about this whole notion of teacher competency and compassion. We have been building our programs on competency alone, and that is not enough. We must add the dimension of compassion, we must be sure that we're teaching gifted children how to live graciously with their giftedness. It is not enough that they merely be capable of high level work, they must both know they can do it and know how to direct it. I think perhaps it was Dr. Elizabeth Drew who, "We need to train the heart as well as the head," and I think that's exactly right. We must add to our programs an understanding of one's own gift, and an understanding of the gifts of others, even when those gifts are different.

Growing up gifted is a very difficult job. But the goal has to be knowing how to live with that gift. The very fact that we have programs helps children do that, because in spite of what people like to say about gifted children not being in a gifted program because it might make them conceited, it's just the reverse. The gifted program helps the child understand his gift and understand there are others who have it also. You see, the teacher says to me, "Oh no, I don't want the gifted child ever out of my classroom. I like

him right in the regular classroom. He challenges the others." He challenges the teacher, he discourages the others. It's no challenge for the teacher to ask a question and have this child's hand up, and ask another question and the same child's hand goes up. Eventually she says, "Now don't you answer it, Jimmy." And you know what happens. Jimmy whispers it. The others wait and listen to what he says and then repeat it. Jimmy can whisper the wrong answer and they'll repeat it, anyway. That has to be discouraging. Spare me from being in that kind of a situation, and spare you also. Spare our children from being in that. That isn't encouraging. I think a good gifted program can probably best be defended, not even so much what it does for the gifted child, but for the good effect it has on other children.

These gifted children with all the things they can do, are, after all, still children. Indeed, we need to remember that. They come to us with great minds, with knowledge far beyond what we can often ever expect, but they also come to us with limited life experiences. Often, they come to us with what appears to be immature emotional development. Perhaps it is not immaturity; perhaps it is mature for their age, but appears immature when you balance it against remarkable, phenomenal, intellectual development.

Working with gifted children, working with all children, is the most glorious work in the world. The challenge that faces us as teachers is to do the best job we can and to develop every child to the best of his ability.

Before I stop, let me say to you, one of the characteristics of the gifted individual is that they have a long attention span. You have all demonstrated your giftedness.

II. WORKSHOP SESSIONS

WHAT IS LEADERSHIP TRAINING FOR THE GIFTED?

Dr. Dorothy A. Sisk

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...Let such teach others who themselves excel.

Alexander Pope

Educators, legislators, and parents have spent considerable time puzzling over the problem of how to educate gifted and talented youngsters in a society that is primarily geared to an egalitarian philosophy and school offerings.

Public Law 91-230, Section 806 stated that the Commissioner of Education should define gifted and talented for purposes of Federal education programs. The definition established by the advisory panel and used from 1976 through 1978 in the Office of Gifted and Talented's funding process is as follows:

> "Gifted and talented youngsters are those identified by professionally qualified persons who by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society."

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual and performing arts
6. psychomotor ability

Utilizing these criteria for identification of gifted and talented children, it is expected that 3 to 5 per cent of the population will be identified.

It is further suggested by the advisory panel that evidence of gifted and talented abilities be determined by a multiplicity of ways. These procedures were to include objective measures and professional evaluation measures which could be administered by professionally qualified persons such as teachers, administrators, school psychologists, counselors, curriculum specialists, artists, musicians, and others with special training who were qualified to appraise a student's special competencies.

Differentiated programs were defined as the following:

1. A differentiated curriculum which denotes higher cognitive concepts and processes.
2. Instructional strategies which accommodate the learning styles of the gifted and talented and curriculum content.
3. Special grouping arrangements which include a variety of administrative procedures appropriate to particular children, i.e. special classes, honor classes, seminars, resource rooms, and the like.

Since this monumental stride forward through the 1970 call for the Congressional study on the gifted and its published report in 1971 which resulted in the formation of the Office of Gifted and Talented in 1972 with its consequential funding ability in 1976-78, much has been accomplished in program development and leadership development.

In 1972 there were ten full-time state consultants for the gifted and in 1978 this number has increased to forth full-time consultants. The funding picture for 1976-78 looks as follows:

1976		1977		1978	
SEA	25	SEA	31	SEA	36
LEA	18	LEA	15	LEA	14
Model	6	Model	5	Model	6
Leadership	3	Leadership	4	Leadership	3
Information Contract	1	Information Contract	1	Information Contract	2
Total - 2.56		Total - 2.56		Total - 2.56	

As a direct result of this increased interest and federal support for gifted and talented, the 1978 service report to gifted indicates that 12% of the nations's gifted and talented are being served. This is an 8% growth as compared to the 4% as reported in 1972.

Yet with this increased service and increased awareness there is still an almost overwhelming need for leadership training in gifted and talented.

What is Leadership Training in Gifted or Who Needs Training

Leadership Training for the Gifted includes formal training programs for teachers, administrators and ancillary personnel as well as inservice training for teachers, administrators and ancillary personnel. Leadership training is considered the key to effective service for education of gifted and talented students.

The widespread general interest in providing some training in gifted education can be seen across the country in colleges and university programs or course work in education of gifted students. In a recent survey entitled The Nations's Commitment to the Education of Gifted and Talented Children and Youth, prepared by the Council for Exceptional Children (1978), they report over 177 institutions of higher education offering pre-service and in-service training programs for gifted and talented youngsters.

They further report that between 1975-76 and 1976-78 there was a 110% increase in the number of states which sponsored in-service training sessions. The number of states responding "no" to the question of sponsored training dropped from 26 in 1975-76 to 7 in 1976-77.

Leadership Training Can be Viewed as Personnel Preparation

From 1976-78 the Office of Gifted and Talented funded three leadership projects, a teacher training program at Teachers College at Columbia, an intern program at George Washington University and a national leadership training institute in Ventura, California.

These efforts indicated the Office of Gifted and Talented's commitment to continuous improvement, for no program can long survive and ignore the need for an ongoing personnel training program. Over a million dollars has been spent over the last three years to train personnel for the classroom, as administrators, as researchers and as parents of gifted.

Leadership Training Can be Viewed as Technical Assistance

Jim Gallagher has continually encouraged educators interested in the gifted to develop support for individual programs at the local level. The Office of Gifted and Talented in its 1979 forward plan has recommended that technical assistance workshops be established to work closely with state education agencies and with universities and colleges that are planning programs for gifted and talented. These workshops will be organized through contracts to groups or individuals who will provide systematic consultation and advice from outside and given programs. It is anticipated that these workshops will provide technical assistance as defined by Gallagher (1975) as follows:

> Technical assistance is help from an outside agency designed to improve the competence of educational service delivery personnel by increasing their management, organizational or program skills, and/or their available information.

These technical assistance workshops might very well employ a talent bank similar to that provided by the National Leadership Training Insititute and utilize the GREAT contract system created by Irving Sato in which a written contract is issued between the educational client and the deliverer of the technical assistance. These contracts can be very specific as to the training needed, where it is to be delivered, and how long and what kind.

It is the hope of the Office of Gifted and Talented that through these technical assistance workshops that leaders can be identified and leadership training offered to state agencies, local educational agencies and institutions of higher learning. These technical assistance workshops will provide a dynamic nature to the leadership training process.

Leadership Training as Part of Model Demonstration Projects

The Office of Gifted and Talented has proposed to fund 12 model projects in 1979 that would have leadership training components within their service delivery to gifted and talented children. Instead of demonstrating through observation solely, these projects could handle interns and provide technical assistance to surrounding areas as well as dissemination of curriculum materials and evaluation instruments.

Leadership Training as Part of Awareness Training with State Leadership

In 1977 the National Association of State Boards of Education was awarded a grant to work with the state boards of education in building awareness on the state level for the need for programs for gifted and talented and

beginning to develop plans and policy for implementation of programs for gifted and talented.

There will always be a need for awareness training as programs continue to develop and grow. This aspect of leadership training can be met through national institutes similar to the three national institutes sponsored by the Office of Gifted and Talented in 1978.

What Kinds of Leadership Training is Needed for Personnel to Work with Gifted?

The teacher is the key to effective programs and the effective use of resources to meet the needs of gifted children. Consequently preparation of teachers to work with gifted and talented is crucial. If a resource plan of one teacher per 100 children as a case load is utilized, with the teacher serving as a resource to the regular classroom teacher and working with gifted children in small groups on a limited basis, 25,600 teachers are needed to serve the population of 2.56 million gifted and talented children.

If a more reasonable approach of one teacher to 50 children is utilized, then the number doubles yielding a need for 51,200. If one hypothesizes that a given university can turn out 20 new teachers for the gifted each year, it will take 2,560 universities to train these young people. Granted that the picture has improved according to CEC (1978) figures with 177 universities and colleges reporting that they have one or more courses on the gifted in their institutions, but there still is a fantastic need for building more training programs.

The need for special teachers of the gifted is apparent. Teachers with no special background are often disinterested or even hostile to the gifted child. Many teachers believe that the gifted will reveal themselves through academic grades and that they need all existing content, plus more. This attitude is most often found in secondary teachers.

Teachers who have worked with special programs tend to be enthusiastic, as evidenced by pre-and post-test information on attitudes of teachers and they report that opportunities for experience with programs and inservice preparation produce changes to more favorable attitudes toward both gifted children and special programs.

The 1971 report to Congress indicated that there was a need for general inservice programs from findings that 50 percent of public school educators opposed acceleration, despite research evidence that acceleration was beneficial at every level from kindergarten to college. Even in studies which had produced favorable results, the researchers commented on lack of articulation, heavy demands, evaluation problems, lack of teacher background, the inability of the school to deal with basic problems, and the unwillingness of the faculty members to free gifted students for needed independent learning.

Teachers of the gifted who recently participated in an inservice awareness conference in Massachusetts reported that they felt an increase in their teaching skills, knowledge of subject matter and increased appreciation of the needs of the gifted and talented.

What are Teachers of the Gifted Like?

The 1971 report to Congress reports that teachers of the gifted are highly intelligent, are interested in scholarly and artistic pursuits, have wide interests, are mature and unthreatened, possess a sense of humor, are more student-centered than their colleagues, and are enthusiastic about teaching and advanced study for themselves. One cannot help but notice that many of the characteristics of teachers of the gifted do indeed match with traditional characteristics of gifted and talented.

Teacher Preparation

The problem of credentials poses much difficulty when one views the complexity and diverse nature of gifted and talented children. One very obvious suggestion is to have a gifted teacher training program be built upon competencies and a teacher's program would be planned as an individualized plan of studies--quite similar to the way in which the teacher would be working with gifted children.

School Personnel Sensitization

School personnel other than teachers need special preparation to understand the needs of the gifted. In the 1979 plan the Office of Gifted and Talented plans funding state educational agencies who want to plan programs for state departments of education that would help them to understand the needs of the gifted.

Through inservice for school personnel, administrators could be reached who often determine the existence of programs, such as school board members. With an intense involvement there may very well be less decreeing of the abolition of gifted programs or denying the need for them. In talking about the need for administrative inservice, one should not forget the shocking facts of the 1971 report that indicated that over half of a representative sample of schools in the United States reported that no gifted students were in their schools! That statement may well have been ascribed to apathy or hostility, but not to fact.

Counselors and social workers also need to be involved in inservice training. Counselors and testing personnel were found to be more concerned with remedial problems than with the gifted. Martinson reports that over and above school personnel being hostile to the gifted, the most hostile group to gifted was the school psychologists. This was reported in the 1971 Report to Congress.

In summary, all of the above indicate the need for comprehensive inservice and pre-service preparation for school personnel who will contact or affect the gifted. Teachers, both the regular teacher and the gifted specialist, need inservice on how to 1) differentiate curriculum and provide for higher cognitive thought processes, 2) utilize instructional strategies which accommodate the learning styles of the gifted, and 3) provide special grouping arrangements in the regular class to accommodate special interests and abilities of the gifted.

Lastly, in planning leadership activities for the gifted, it would behoove us to develop task-oriented and socially-oriented traits in the leadership personnel who will be working with the gifted, for often as reported by Gephart and Cunningham (1973), these are the difference between success and nonsuccess and become quite important for leaders to model for others.

Under task orientation one should consider achievement drive, drive for responsibility, initiative, persistence, responsible in pursuit of objectives and task-orientation. Equally important are the socially-oriented traits: the ability to enlist cooperation, administrative ability, cooperativeness, diplomacy, tact, popularity, sociability, and social participation.

In order to develop the leadership that will be needed to guide programs for the gifted in the future, we will need to utilize the above leadership traits as characteristics to be both identified and developed. These leadership activities will call for imagination and insight on all of our parts in order to call them forth. But without the needed leadership, we cannot reach our goal--equal education for all. Nowhere is our goal for gifted education more eloquently stated than in the words of Judge Gitelson.

"...Equal education is the foundation of the right to be a human being... This does not mean that any gifted child or any child having a greater capability to learn may or shall be deprived of his or her opportunity of learning more. It does mean that every child shall have the equal opportunity to learn to the best of his or her ability. That opportunity must be made available to all on equal terms."

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THEORETIC FOUNDATIONS OF DIFFERENTIAL EDUCATION FOR THE GIFTED

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I. Introduction

This session is modeled upon a symposium presented at the 46th Annual International Conference, Council for Exceptional Children, in New York City in the spring of 1968. That session was entitled, "Differential Education for the Gifted: Theory and Applications." The present speaker (Ward) presented an introductory paper under the title, "Theoretical Principles": ensuing papers addressed the problems of theory based curriculum (Schifferli, L.) evaluation (Renzulli, J.) and research (Purkey, W.).

The opening remarks for this symposium (1978) are restricted to a brief substantive recapitulation of the nature and effects of theoretic analysis upon the practice of DEG. The ensuing presentations collectively reflect the infusion of theoretic considerations--generalizable principles, abstracted constructs, psychological and epistomological theories and systems--different from and more advanced than what was earlier presented. The individual presentations, which at the conference were offered as separate papers under the respective authorship noted, are submitted for the conference proceedings as sections within a single paper.

II. The Role of Theory in The Practice of Differential Education for the Gifted

The national scenario during the middle 1970's reflects what is quite likely to be an unprecedented degree of popular and political interest in gifted youth. For those across the nation who are newly aware and enthusiastic, but as yet to become satisfactorily informed in the history of the movement and in its conceptual undergirdings, it must indeed seem to be the "best of times." And indeed the excitement which teachers, and a growing number of administrative personnel are experiencing in the conference and convention hall today, and in a proliferating number of newsletters and memoranda from special groups and standing organizations is markedly contagious. Yet, as the lead author of this paper observed in the earlier session, there appear to be some very fundamental concerns which do not surface within this kind of popular clamor and professional climate, as is observed in this citation (Ward, 1968, p. 1):

> The present era falls heir to a scattered and inconclusive heritage, and bears the earmarks of continuation of lost opportunity. The gifted child today excites concern in thousands of individual parents and teachers, but few effective coalitions of these interests have emerged. Separate and rival professional organizations have developed, but only sporadic gestures have been made toward unification among national and state groups for the common mission of taking an effective role in shaping the policies and practices of the American school. Differential education for bright and talented youth today...(embodies scarecely) any conceptual rigor at all. It is undersold in conception by major projects, absorbed by exciting advances in general education, overshadowed by popular concern with creativity and cultural

> disadvantage, and dwarfed in material support by other types of exceptionality among persons. As Dickens wrote in A Tale of Two Cities," ... it is the worst of times, it is the age of foolishness; it is the epoch of incredulity; it is the season of Darkness..."

Though the authors here expect no great rush of acceptance of the observation that things underneath the glowing surface have not changed a great deal, and they are themselves greatly appreciative of an enlarging place in the sun for advocates of extraordinary education for positively extraordinary persons, concern for the more scientific and theoretic aspects of the problem remains. The present occasion provides a further opportunity for expression of this anxiety within an era of apparent prosperity, in the constructive form of attempted advancements into what we term "theory." Most of the present thought relates to the epistemological aspects of Differential Education for the Gifted, which area is one among other kinds of "academic parallels" into which studies at the institution with which the authors are affiliated are being extended.

Perhaps our fundamental conviction may be succinctly stated in the proposition:

> That theory comprises the "intelligence" of educational practice, such that adequate intellectual foreplay in the anticipation of a practical or moral enterprise, e.g., conscious value and intent toward appropriate educational provisions for gifted persons, conduces toward validity of these efforts.

The infusion, that is, of theory into practice (TIP, in the sense developed at the Ohio State University) makes the obverse condition possible, namely that practical activities contribute to theory (thus PIT, and in full, TIPPIT or TPT). Thus the Virginia effort picks up on Dewey's explicit notion that"...theory, if sound, is eminently the most practical of all educational considerations."

III. Epistemology and Curriculum: System and Class

The advancement and revision of the knowledge base perspectives in Differential Education for the Gifted is dependent upon the deliberate attempts of educators to explore new creative approaches to the construction of curriculum for the positively deviant youth. The direction suggested is exploration of epistemological schemes for the purpose of developing curricular parallels for the gifted student; a suggestion rendered both reasonable and feasible through reference to concepts and processes such as those set forth by Ward's axioms (Ward, 1961).

An epistemological system yields coherent aggregates of ideas with an emphasis upon understanding the relationships of its various parts. This approach provides a coordination and availability towards understanding the make-up and interrelationship of the body of knowledge, which may be used to optimally direct the learning of the gifted individual. Experiences for the

gifted, based upon epistemological schemes, provide sound concepts and relationships within a curriculum and offer a framework for personal exploration at various stages of development. This framework allows for the purposeful arrangement of those specific areas to be emphasized. A curriculum for the able learner parallelling a system of epistemology adds wholeness and conceptual depth to the instruction, preventing fragmentation of areas for study.

An example of an epistemological system, is Philip Phenix's Realms of Meaning (Phenix, 1964). Classes are the divisions of the system, grouped by common properties, and in Phenix's System the classes are his six Realms of Meaning. Instruction in all classes, or realms, is relevant and necessary within the curriculum to provide a better analysis of meanings through understanding the relationships among the various parts to the whole.

Phenix's System organizes knowledge into particular realms. To those who believe that the education of the gifted child should extend into all the major areas of knowledge (Ward, 1961), such a system provides a basic structure for curriculum development. Individuals charged with developing the curriculum need to compare the scope of the present curriculum to the scope or organized knowledge. These efforts will serve to point out glaring weaknesses as well as present strengths. It is imperative that the possibilities be considered prior to final selection of subject areas, rather than reverting back to "what has always been." Too often, the child emerges after twelve years of schooling unaware of the diversity and wealth of available information. This perception can be corrected if those so designated build the curriculum around systems which attempt to classify systematized knowledge (Phenix, 1962).

With this system as a guide, the curriculum developer can then outline areas to be stressed at each grade level. The decision to emphasize one specific area or several will depend upon grouping arrangements, personnel, and instructional time allotments. Schools with programs limited to a weekly seminar, Saturday morning class, or periodic afternoon meeting will have a design that is quite different from those providing special classes which meet daily or for extended periods during the year. Although each program will require a unique design, the design will have emerged from the developers careful selection from the range of possibilities outlined by a system of organized knowledge.

Once these areas are specified, units of instruction can then be developed. This task rests upon those individuals (teachers, designated teachers of the gifted, librarians, etc.) responsible for teaching the gifted and talented. The units complete with objectives, selected experiences, culminating activities, and lists of resources are the instructional creations within the framework of the curriculum; a curriculum grounded in an epistemological system. Kerlinger in commenting on research designs stated (1973, p. 314):

> All man's disciplined creations have form. Architecture, poetry, music, painting, mathematics, scientific research --all have form. Man puts great stress on the content of his creations often not realizing that without strong structure, no matter how rich and how significant the content, the creations may be weak and sterile.

Teachers design units of instruction after and only after a structure or framework has been established. Once those developing the curriculum have laid the foundation, then teachers are free to carry out the instructional planning. Unfortunately, this is seldom the case. Teachers are not only required to plan the units but also to develop a curriculum. The debate over who has the responsibility for curriculum development (teachers, principals, boards, public) is beyond the scope of this discussion. The fact remains that teachers are faced with both tasks, however distinct the two are in theory.

The classroom teacher has two alternatives. Either continue as usual at the level of instruction or formulate a curriculum for use in the classroom which will serve to facilitate unit development. The first will result in a movement without ultimate direction, the second is a defensible program of study. For persons who choose the latter here are several suggestions.

1. Select a system -- decide on a scheme that attempts to classify knowledge. If you are seeking a simple system, try the classical one which has the following four areas: humanities, mathematics, social studies, and natural sciences. Each of these can then be further subdivided. For instance, the humanities might include art, music, literature, and language.

2. Organize your present stockpile of units -- begin with what you have. Pull together the material, notes, etc. and make a list, if necessary.

3. Compare the units on hand with the particular design you have created from the system. In what areas have you already developed units? If, for instance, you have decided with the humanities to concentrate on art, music, or literature then make a note of those units presently available in each of these areas.

4. Identify the areas which lack any present units of study. You may have a sufficient number of units in literature and art but none in music. Identify all such areas and determine possible topics for units. These new units can be developed in depth once you have completed the next step.

5. Prepare a plan which includes the titles of the units to be covered within each area you have selected. (Certainly the areas as well as the number of units within each area will depend upon grouping arrangements, time factors, etc.)

6. Reevaluate the structure of your design as well as the units periodically. Make necessary additions or deletions. With this firm foundation your program will continue to improve from one year to the next.

These suggestions, which emanate from the relationship between unit and system, are directive rather than prescriptive in function and should provide guidelines for teachers who have come to realize that the curricular structure based upon systematized knowledge is the key to the selection and development of meaningful instructional units.

V. Conclusion: Continuity in the Effort

This conference session, presented as noted by individuals associated with the Department of Foundations of Education, University of Virginia, represents an interest in the scientific and theoretic foundations of DEG which extends back for something more than two decades. The pursuit of such abstract levels of inquiry and observation is commensurate with the function of universities, that they lead intellectually within the parameters elected for research and service to the educational sector. Thus our commitment to philosophic analysis and reconstruction in the problems and issues of DEG, serves generically -- much in the vein of the TTT concept, the training of teachers of teachers -- to provide for the necessary but lower order levels of empirical inquiry and instructional technique, substantive matter rendered initially more valid and hence productive, vis-a-vis the practicing scenario. An expression of this institutional position and program concept, in the form of an objective indicated in a recent proposal for training funds will suffice as a concluding focus in representation of this enduring and continuing interest:

> Objective: To develop this singular training program (directed toward the training of leadership personnel in DEG) around the substantial but secondary intent ... to re-examine the knowledge base itself in Differential Education for the Gifted, to which disparate informational source the researcher and essayist presently and in the past have had recourse: to effect constructive revisions in these theoretical foundations where possible, in an advance toward the rudiments of an integrative science, from which transformations more sophisticated theory and practice may be derived; and through this intent and process, to make explicit endeavors to seek in addition to thought from the empirically productive community, the rigorous and refreshing thought of the philosopher (ethical, axiologic, epistemological) as well.

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DEVELOPING DEFENSIBLE PROGRAMS FOR THE GIFTED AND TALENTED

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Introduction

What is (or should be) different about the types of learning experiences that are advocated for gifted students?

Isn't what you are doing for the gifted also good for nearly all youngsters?

Unless satisfactory answers to these questions can be provided, programs that serve superior students will be extremely vulnerable to both the critics of gifted education and to persons who may be sympathetic with this area, but who also feel special services are essentially a luxury item that schools can easily get by without. But more importantly, answers are necessary for the true believers in special education for the gifted who occasionally experience pangs of conscience because they can defend programs philosophically but not programmatically or in terms of the day-to-day experiences that are provided for gifted youngsters.

The purpose of this article therefore is threefold. First, some critical questions will be raised about a number of current practices that parade under the banner of special education for the gifted. Second, a rationale will be proposed for special programs that is based upon research studies dealing with the characteristics of gifted and creative persons. The third purpose will be to present a model that can be used as a guide by teachers and administrators in the development of truly defensible programs in this area of special education.

Some Concerns About Current Practices

Far too many programs for the gifted are essentially collections of fun-and-games activities. Children walk into a resource room for the gifted, play a game or engage in artsy/craftsy activities until their class period is over, and return the next day to pursue some similar type of experience. In questioning teachers about the purpose or objectives of such activities, the reply is almost always that it is "challenging" and that the children are "really enjoying" what they are doing.

Although gifted students should have an opportunity to participate in a variety of exploratory experiences and activities that might be described as recreational thinking, an important part of all programs for the gifted should be the systematic development of the cognitive and affective processes which brought these youngsters to our attention in the first place. Systematic development simply means that professional educators should know and be able to defend the types of processes that are being developed through the activities that gifted children pursue in special programs. While freedom of choice is important so far as topic and learning style are concerned, once a youngster has decided upon an area that he or she would like to pursue, it becomes the teacher's responsibility to assist that youngster in developing the skills of inquiry that will make him or her a "first-hand inquirer" in the particular area in which he or she chooses to work.

When gifted youngsters do undertake individual research projects, there is frequently little difference between regular and special programs in the level or quality of inquiry. References consist of the same encyclopedias or library books used in the regular school program. The focus is frequently on the acquisition of knowledge or facts; and where differences do exist, it is almost always in terms of freedom of choice, lack of pressure, and the absence of grading. Practices that are limited to this degree of differentiation have raised serious questions about the appropriateness of special programs for the gifted and talented.

Another general area of concern has been a preoccupation with mental processes and an almost complete absence of interest in the structure, methodology and content of the organized fields of knowledge. In emphasizing mental processes a la Bloom's Taxonomy and Guilford's Structure of the Intellect Model, our energies may have been put in the wrong place. While we have attempted to design curriculum that will develop the higher mental processes, it is open for question whether the valid psychological concept of mental process has been a useful educational concept so far as curriculum planning is concerned.

That is not to say that we are against process objectives or that these psychological phenomena do not exist and cannot be developed through programming. But it is more than likely that they are things that "just happen" in good learning situations, and the harder we try to force processes into a behavioral objectives type of format, the more articicial and structured the curriculum will become. Our preoccupation with process objectives has in fact caused us to forget that process is the path rather than the goal of learning.

Rationale for Special Programs

If many of the practices currently employed in special programs are unacceptable so far as defensibility is concerned, what are the types of educational activities that will satisfy the criteria of qualitative differentiation? The answer to this question involves a variety of considerations, not the least of which is the definition of giftedness itself. How one defines giftedness is crucial to the ways in which one goes about making provisions for persons in this category of exceptionability.

Research on gifted and creative persons in the adult world has shown that although no single criterion can be used to determine giftedness, persons who have achieved reputations of eminence possess a relatively well-defined cluster of three basic traits. The first of these traits is generally acknowledged to be an above average, though not necessarily exceptional level of intelligence. In a review of several research studies dealing with the relationship between academic aptitude tests and professional achievement Wallach (1976, p. 57) has concluded that:

> Above intermediate score levels, academic skills assessments are found to show so little criterion validity as to be questionable bases on which to make consequential decisions about students' futures. What the academic tests do predict are the results a person will obtain on other tests of the same kind.

An implication of this conclusion is that entrance into special programs should not be limited only to those students who score in the upper ranges on traditional measures of aptitude. If we accept this conclusion, however, the question is immediately raised--What other criteria should be used for identifying gifted students?

A second and perhaps more influential trait of eminent persons is a high level of task commitment or intrinsic motivation to perform in a particular area. Several studies have shown that accomplished scientists, writers, mathematicians, and architects are far more task oriented and involved in their work than are people in the general population (McCurdy, 1960; Roe, 1952; Helson, 1971; and MacKinnon, 1964, 1965). As Roe (1952, p. 25) suggested in her findings on task commitment:

> The one thing that all of these scientists have in common is their driving absorption in their work. They have worked long hours for many years, frequently with no vacations to speak of, because they would rather be doing their work than anything else.

The third trait that characterizes gifted persons consists of abilities that have usually been grouped together under the heading of "creativity". Eminence in the adult world is usually regarded as prima-facie evidence that an individual possesses creative ability. In fact, the terms "gifted", "genius", and "eminent" are often used synonymously with the word "creative" when describing persons who have made significant contributions; it is usually the originality, novelty, or uniqueness of a person's contribution that brings him or her to the attention of the public.

The study of eminent persons suggests that an interaction exists among the three basic traits that have been discussed--above average ability, task commitment, and creativity--and it is this interaction rather than any single trait or additive factor that results in superior performance. But in order for these traits to interact and manifest themselves they must have some type of problem with which to deal or a certain arena in which to perform. Thus, any definition of giftedness or formula for eminence in the adult world must take into consideration both the cluster of traits and a particular problem area to which these traits can be applied.

A Program Model

The Enrichment Triad Model represents an attempt to integrate the findings on the characteristics of eminent persons into an overall design for programming for gifted and talented students. As depicted in Figure 1, the Model consists of three interrelated types of enrichment activities. The first two types, General Exploratory Activities and Group Training Activities, are considered to be appropriate for all learners; however, they are also important in the overall enrichment of gifted and talented for at least two reasons. First, they deal with strategies for expanding student interests and developing thinking and feeling processes. Second, and perhaps more importantly, these two types of enrichment represent logical input and support

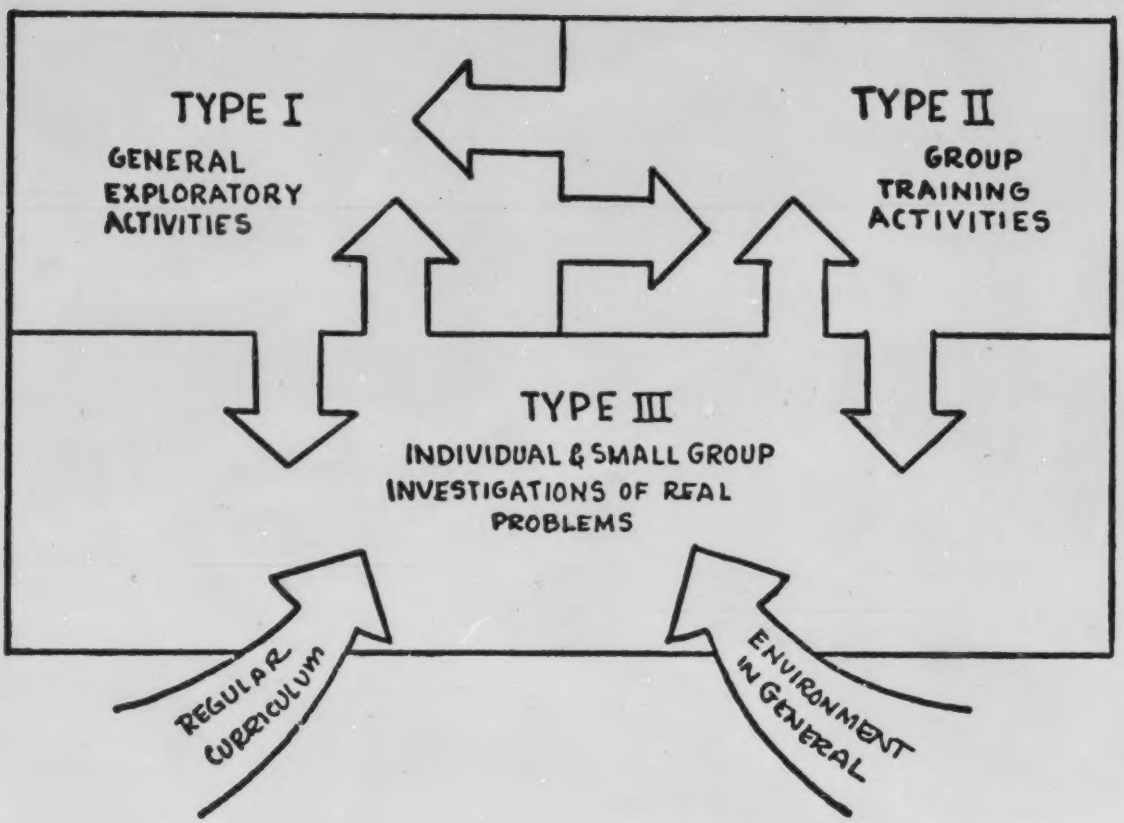

Figure 1. The Enrichment Triad Model

systems for Type III Enrichment which is considered to be the only type that is appropriate mainly for gifted students. Type III Enrichment, entitled Individual and Small Group Investigations of Real Problems, is the major focus of this model. As suggested in Figure 1, approximately one-half of the time that gifted students spend in enrichment activities should be devoted to these types of experiences.

Type I Enrichment: General Exploratory Experiences

Type I Enrichment consists of those experiences and activities that are designed to bring the learner into touch with the kinds of topics or areas of study in which he or she may have a sincere interest. These experiences should enable youngsters to begin to make their own decisions about the topics that they might like to explore at greater depths and higher levels of involvement. Thus, one of the major objectives of Type I Enrichment is to give both students and teachers some hints about what might be a bona fide Type III Enrichment activity. A second objective of Type I Enrichment situations is to assist teachers in making decisions about the kinds of Type II Enrichment activities that should be selected for particular groups of students.

At least two general guidelines are suggested to help achieve the objectives of Type I Enrichment. First, although a great deal of exploratory freedom must be permitted, students should be made aware that they are expected to pursue exploration activities purposefully; and that after a given period of time has elapsed, each youngster will be responsible for analyzing his or her own experiences and coming up with some alternative suggestions for further study.

The second guideline deals with strategies for developing categorical interest centers in the classroom or resource room. These centers should be stocked with materials that are broadly representative of selected themes or fields of knowledge. The selection of appropriate materials for the interest centers is especially crucial because the objective here is not simply informational, but rather to provoke curiosity about the dynamic nature of a field and an interest in doing further research. Thus, it is essential that the materials in each center include descriptive information about particular fields of knowledge rather than merely collections of the accumulated information in a given field.

Type II Enrichment: Group Training Activities

Type II Enrichment consists of methods, materials, and instructional techniques that are mainly concerned with the development of thinking and feeling processes. Over the years a variety of terms have been used to describe these operations or "powers of mind". These terms have included critical thinking, problem solving, reflective thinking, inquiry training, divergent thinking, sensitivity training, awareness development, and creative or productive thinking.

Type II Enrichment activities are an important part of a total enrichment model for the gifted and talented for several reasons. First, such activities, if appropriately selected, provide for a range of response options (i.e., they must be openended) so that youngsters with superior potential will have an opportunity to escalate their thinking and feeling processes to whatever

levels their own natural abilities allow. Giftedness and creativity are in the student's response (not the stimulus materials), and it is what the youngster brings to the learning situation that makes him or her gifted.

Second, Type II Enrichment activities also have the potential for introducing some youngsters to more advanced kinds of studies. For example, a student becomes excited about advertising as a result of doing a creativity training exercise entitled "Let's Write a Slogan", might go on to do very sophisticated work in this area. Thus an interrelationship can be seen between the Type II and Type III sections of the model and it is this connection (rather than the creativity training activity per se) that accounts for a truly enriching experience.

Finally, group training activities provide students with the skills and abilities necessary to solve problems in a variety of areas. Since gifted students are characterized by both a wide range of interests and an investigative attitude, systematic experiences in the thinking and feeling processes are necessary tools for more advanced types of inquiry.

By way of summary, Type II experiences should be carefully selected so that they represent a logical outgrowth of student interests and concerns rather than mere random involvement in whatever happens to be available or whatever the teacher might have a fancy for. Purposefully selected activities can help "tie together" the other two components of the enrichment model but more importantly, by viewing Type II Enrichment as one aspect of a total enrichment model, we can help to avoid the danger of making process-oriented activities the be-all and end-all of a program for the gifted.

Type III Enrichment: Individual and Small Group Investigations of Real Problems

Type III Enrichment consists of activities in which the youngster becomes an actual investigator of a real problem or topic by using appropriate methods of inquiry. In order for a student to become an investigator the focus of his or her efforts must shift from consumer-oriented productivity to real-problem-oriented productivity. A very subtle but important distinction exists between these two types of involvement. The student-as-consumer may engage in projects or claim to be "doing research", but such activity frequently consists of writing ritualized reports about conclusions which have been reported by other people. Nowhere in this process does the student use information as raw data.

Real-problem productivity, on the other hand, focuses on the identification and delimitation of problems that are similar in nature to those pursued by authentic researchers or artists in particular fields. Thus, activities that are considered to be bona fide Type III Enrichment experiences should reflect the student's emulation of the professional investigator to such a degree that the student actually becomes a professional himself or herself.

The success of a Type III Enrichment activity is in large part dependent on the degree of task commitment or motivation that the student brings to the investigation. Task commitment is a function of the realness or sincerity of students' interests, and thus, the first major responsibility of the teacher

in carrying out Type III activities is to assist students in analyzing their own interests. Several issues should be considered in the identification of student interests. First, many youngsters will have already developed intense interests and commitments to particular topics or areas of study. In such cases our major responsibility is to help them focus their interests and to translate these interests into solvable problems. In addition, several student interests will undoubtedly result from General Exploratory Activities (Type I), Group Training Activities (Type II), the regular curriculum, and the environment in general. These existing or newly developed interests are "naturals' for Type III Enrichment experiences and should be capitalized upon whenever possible.

One way of obtaining some useful leads for exposing students to relatively new areas of potential involvement is through a community survey that seeks information about both the vocational and avocational interests of parents. Such a survey can also identify persons who might be willing to follow-up an exposure activity (i.e., lecture, slide presentation, or visit to their laboratory, studio or office) with some intensive involvement with individuals or small groups of students. Youngsters can also be helped to examine their present or potential interests through the use of interest inventories.

The second responsibility of teachers in developing Type III Enrichment experiences consists of providing students with the tools of inquiry appropriate for the fields of investigation being pursued. In order to do this educators should learn how to teach some general exercises in inquiry training. It is important to keep in mind, however, that exercises in inquiry training are only helpful up to a point. Like "discovery learning", they are highly controlled and can quickly become ends in and of themselves.

General instruction should also be provided in advanced library skills. Teachers should familiarize themselves with the existence, nature and function of the full range of reference materials that are available for in-depth study in most fields. These materials include such items as indexes, directories, periodicals, source books, dictionaries, specialized encyclopedias and abstracts.

Perhaps the most important thing that must be learned in order to promote Type III Enrichment is how to identify and locate How-To-Do-It resources. Almost every field of study has such guides and some are written at relatively elementary levels. It is important to analyze all resources in terms of an individual youngster's reading and conceptual level and to serve as a translator whenever a particular concept is beyond the child's level of comprehension. If the teacher cannot serve as a translator, the assistance of a person with specialized training should be sought.

The third and final responsibility of the teacher is concerned with helping students to communicate the results of their investigative work in a realistic and meaningful manner. Creative and productive persons are highly product-oriented and rarely engage in creative work without an audience in mind. Indeed, one of the major characteristics of a real problem (as opposed to a training exercise or presented problem) is that the producer is attempting to inform, to entertain, or to influence a relatively specific but nevertheless real audience.

Developing relatively realistic outlets for student products will require persons involved in the education of the gifted to exercise their own creativity. Assistance in this effort can be sought from creative/productive professionals and with persons from various interest groups. Local organizations, such as historical societies, science clubs and dramatic groups might be explored as potential audiences, as should children's magazines that routinely include the work of young people.

Identifying appropriate outlets and audiences for student products is a very important part of the management function of teachers. Unless the time is taken to perform this role in an energetic manner, there is little likelihood that Type III Enrichment will achieve a truly qualitative difference from the usual project activities that are popular in most programs.

The extent to which all students can pursue knowledge as a first-hand inquirer or turned-on professional is not yet known. As far as gifted students are concerned, however, the history of human achievement (and indeed, the history of many programs for the gifted) is filled with examples of bright young people who not only emulated the methods of professionals, but who were in fact professionals themselves. Gifted children can unquestionably function in the manner of true inquirers and for this reason it is recommended that investigations of real problems should be the mainstay of programs for the gifted and talented.

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COUNSELING THE GIFTED:
AN INTERPERSONAL RELATIONS APPROACH

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Training in Interpersonal Relations is probably the single most important resource a gifted program can provide for middle school students in grades four through ten. (In fact, one could extend this need to all students although I will focus on the specific needs of the gifted.) This is not to advocate gifted programs that omit academics--but it is to state a priority if choice must be made.

Adolescents and near-adolescents are often painfully uncomfortable with being thought of as "different". This discomfort cannot be resolved by omitting identification of gifted students. The gifted and their peers are probably well aware of their "differentness" and the identification serves as confirmation of that fact or, ideally, as a positive encouragement of it. However, the student is usually left to cope with his/her uniqueness alone.

Interpersonal relations training is not a therapy approach to be used with students who have severe personal problems. It is a way of helping "normal" students understand and appreciate both themselves and others. It is a way of helping students understand why being different is all right. And it is a way of teaching them how to show others that they are all right.

Some gifted students learn these lessons on their own and manage (although often with some pain) to develop coping strategies for their daily life. Others develop dysfunctional responses--bragging, "put downs", isolation, standoffishness, frequent confrontations with authority, etc. Those with dysfunctional responses may find themselves developing increasingly negative attitudes toward school and academic work. I contend that this attitude is far more dangerous for that student's later intellectual development than any lack of academic work during these years. Such an attitude has the power to continually interfere with the student's ability to grow and develop intellectually.

Interpersonal relations training can impart skills to the student that can help him/her deal with conflict in a constructive way. In a unit on identity and self-concept students may confront their own feelings about their "giftedness" and realize in group discussion that some of their problems are shared. Students may also be able to develop empathy (occasionally a rare commodity in that age group) for the feelings of others in relation to the abilities of gifted students. Also, gifted students are often involved in experiences and situations that, while appropriate to their intellectual level, are far in advance of their emotional development. If their emotional development received some training, it might help to bring their skills and abilities into harmony. Finally, while virtually all students (all people?) could benefit from the development of listening, communication, problem-solving, and group cooperation skills, I have found that gifted students quickly grasp and apply these skills.

Training in interpersonal relations is an investment in the student's future. It is an attempt to insure the student's ability to be able to realize his/her potential. It should not be used as an attempt to make an unusual or creative child "fit in" but to help him/her understand, accept and even rejoice in his/her uniqueness.

A Sample Curriculum

In Falls Church, we have developed interpersonal relations training aimed specifically at the gifted child, as well as both groups and courses available to all students. The general program includes a human relations course in the high school, a peer counseling program, and substantial group work by the counselors and psychologist. The gifted program provides small group training and, when scheduling permits, a middle school interpersonal relations course which may carry either English or social studies credit.

Content material covered in small groups varies with the experience of the group members and with the age level. However, the general topics covered are similar to but more limited than those covered in the interpersonal relations course. Typically, little or no written work is required in a small group and no academic credit is given. Participation in both the counseling groups and the course is entirely voluntary.

Following is 1) an outline of the Interpersonal Relations Course designed for middle school students at George Mason Junior-Senior High School, 2) the course bibliography for the students, 3) a sample group exercise and, 4) the materials used and results of the final student evaluation.

INTERPERSONAL RELATIONS COURSE

Description:	This course is designed to give gifted middle school students experience and skills in interpersonal relations. Students will develop skills in problem-solving, communication, decision-making and group process. It is also oriented toward developing an understanding of the student's own abilities and the reactions of themselves and others toward those abilities.
Schedule:	Two groups in the quarter. The fourth quarter group will be divided into two subgroups: Those who have counseling and group experience and those who do not. The instructor will alternate meetings with each group with a peer counselor. Two days a week will be spent in group discussions, two days a week discussing readings and doing worksheets and one day a week is a work day.
Outline:	This outline is not necessarily sequential due to the different levels of experience among students in the interpersonal relations course. Students who have experience in counseling groups may begin with introductory experiences to meet new group memebers but may then move on to more advanced work.

I. Introductions. Structured experiences to develop interactions and openness among group members.

II. Identity and Self-Concept. Readings include Bless the Beasts and Children. Discussions on identity, risks and values. Others expectations and the effect on our values and ideas. Readings include: Orwell, On Shooting an Elephant and Lytle, A Narrative.

III. Group Process: Communication skills include listening, feedback, expressing emotions, "I" messages, roadblocks to communication and active listening.

IV. Group Process: Problem-solving includes group competition and cooperation, roles played by group members and group observation skills.

V. Self-Evaluation and Course-Evaluation.

Course Requirements:

1. Journal. Entries must be made at least three times a week and must be at least one page long. The journal entry should focus on either experiences within the class or outside experiences that relate to the topics discussed.

2. Three book reports (see attached bibliography).

3. Worksheets on presented material

4. Developing and conducting a structured group experience

5. Participation in group exercises and discussions

INTERPERSONAL RELATIONS BIBLIOGRAPHY

Students are required to do three book reports: two written and one oral. Books may be chosen from the list below or by approval of the teacher.

Axline, V.M., Dibs: In Search of Self

Berne, E., Games People Play

Brandon, N., Breaking Free

Brandon, N., The Disowned Self

Friedman, M., The Story of Josh

Ginott, H., Between Parent and Child

Golding, W., Lord of the Flies

Ginott, H., Between Parent and Teenager

Grier and Cobbs, Black Rage

Harris, T., I'm OK - You're OK

Herndon, J. The Way It's Spozed to Be

James and Jongeward, Born to Win

Kafka, F., The Trial

Katam, E., A Patch of Blue

Kesey, K., One Flew Over the Cuckoo's Nest

Miller, A., The Crucible

Orwell, G., Animal Farm

Orwell, G., 1984

Peck, R. A Day No Pigs Would Die

Perls, F., Gestalt Therapy Verbatim

Perls, F., The Gestalt Approach to Eyewitness Therapy

Skinner, B. F., Walden Two

Steinbeck, J., The Pearl

West, J., The Friendly Persuasion

MURDER

A GROUP-PROBLEM-SOLVING EXERCISE

One of the most popular and useful exercises I have ever included in a course or small group involves the use of an exercise that is particularly helpful in helping a group see the need for all members to contribute in discussions and to pinpoint which members are able to do so and why. It is also useful for looking at general aspects of group interaction. The exercise is a group problem-solving task used in conjunction with video tape and group evaluation sheets.

The basic exercise is "Recognizing the Value of all Contributions" from Discussion Skills Through Games in which each group member has certain clues about a murder. No group member has all the clues and all have some clues that are necessary for solving the murder. The group task is to find out the murderer, the weapon, the motive, the time of the murder and the place of the murder. (Students can also be encouraged to develop their own mystery puzzles.) The instructor does not tell the students that they have solved the puzzle until all five items are correct. If any items are wrong, the group is not told which ones and must return to the task. The group is also not given any hints on how to organize to solve the puzzle. They are told that they may share clues verbally but that they may not use paper or pencil, pass each other clues or walk around the room.

One of the key aspects of my use of this exercise is that it is video-taped. The students sit in a semi-circle while solving the problem and two video-tape cameras take both close-ups and long shots of the students as they try to solve the problem. I usually sit at the controls. The tremendous advantage is that rather than trying to remember their own actions during the problem-solving process, students may actually watch themselves and observe their own behavior as well as that of others. It is often a milestone in self-knowledge. A few days after the problem solving task has been performed, the students are brought together to watch the videotape. They are given a short discussion about what to observe and they are provided with the evaluation sheet that follows. The evaluation sheets are explained in detail and the students either rate only themselves (in the early stages of group work) or rate everyone in the group (in the later stages). A group discussion about the ratings, and therefore all aspects of group interaction, follows.

Students are repeatedly surprised to watch their own behavior during the problem-solving session. The surprise is not always negative. Students sometimes find out that they have contributed far more than they thought. Or that the reason their ideas had not been heard was that one person always interrupted. They also find out if they have been bossy, interruptive or kept their clues to themselves. It is a wonderful way of helping students to see their strengths and needs for themselves rather than just through the eyes of of their teacher.

GROUP EVALUATION SHEET

Behavior:	Name:						
Group Task Needs:							
1. Suggest how to organize the group							
2. Keep the group on the subject							
3. Suggest solutions							
4. Restate the problem or goal							
5. Clarify the ideas of others							
6. Summarize what has been said							
7. Shares information when needed without being asked							
Group Maintenance Needs:							
1. Praise, agree or accept the contributions of others							
2. Reconcile disagreements or offer a compromise							
3. Encourage others to participate							
Individual Needs:							
1. Express disapproval of ideas of others							
2. Be negative or stubborn							
3. Call attention to self by excessive joking horseplay or lack of involvement							
4. Interrupt others							
5. Give orders							

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PROBLEM-SOLVING TASK REACTION FORM

1. Whose participation was most helpful in the group's accomplishment of the task?_____
   What did she/he do that was helpful?

2. Whose participation was least helpful in the group's accomplishment of the task?_____
   Why?

3. What feelings did you experience during the problem-solving exercise?

4. What role(s) did you play in the group as it worked on the task?

Interpersonal Relations: Student Contracts and Evaluations

At the beginning of the quarter term or during one of the first meetings of the group, students complete a "time capsule" and seal it. In the course it is taped in the back of their journals--in the group it is kept by the instructor. The time capsule carries the following quotations:

> "The only thing that one really knows about human nature is that it changes. Change is the one quality we can predicate on it. The systems that fail are those that rely on permanency of human nature, and not on its growth and development".
> --Oscar Wilde
>
> What changes will take place in you as you grow as a person?

The capsule also includes a place for the date and says, "Some of the changes I would like to make in myself are....."

The students are directed to try to make the changes; ones that the course can help them accomplish and that might realistically be accomplished within the quarter. However, no changes are rejected by the teacher once the contracts are written (finding out how much change is realistic is a valuable piece of learning). In the course these capsules are used as a contract--to help the student evaluate his/her own progress and growth and to help the teacher know (and therefore be able to focus on) each student's individual needs. In the small groups, these capsules actually help design the experiences to be offered. Again, they can help acquaint the teacher with the students' needs and the small group experiences can be designed to address these needs. At the end of the quarter the contracts are opened and the students are handed a sheet that contains the original quotation and the following:

<u>Ways I have changed during the quarter</u> <u>Ways I have not changed</u>

At the bottom of the page were the following questions:

How happy am I with these changes or lack of changes? What can I do to make happen the changes I want?

Listed below are some excerpts from the "ways I have changed and ways I have not changed" sections of individual student evaluations. Note in reading these evaluations that students report major changes in the areas of expression of emotions, listening skills, self-understanding and self-growth and enhanced self-concept.

CHANGED: "My brother and I are getting along better. I know more about others feelings and my own. I understand how to help people with their problems."
NOT CHANGED: "I still argue with my dad."

---

1. Cromwell, Chester et al.
   Becoming: A Course in Human Relations

CHANGED: "I think I can talk to people about problems better: both theirs and mine, thanks to the course. I put down to have a better memory, but I didn't really improve on that."

CHANGED: "Better listening skills, expressing my emotions, discussing things I'm not sure about, communicating with people.
NOT CHANGED: "Writing horrible book reports."

CHANGED: "I have learned to talk with an open mind. I can now express my true feelings at times. I have increased my knowledge in the area of psychology. I learned different skills that will help in different situations. I have gotten a lot out of this class. Being able to talk and express my feelings a lot better. I think that everyone should do this and glad that I can. It makes me feel great when I can get things that bug me or whatever out."
NOT CHANGED: "To be able to not put things off to the last minute. I have improved in this a little. I don't know why I always put things off until the last minute. I think or thought too much of pleasure than work, I think."

CHANGED: "I have read a lot more than I had before. I understand myself better than I did. I have not studied at home yet but I am getting better."

CHANGED: "I have talked with an open mind. I have increased my listening skills. I expressed my feelings much more and I have talked out more than I used to. I have learned a lot about psychology and the skills that are involved with it. I think that I have expanded my knowledge in certain things."
NOT CHANGED: "I don't think that I comprehend any better than I used to."

CHANGED: "I didn't talk a lot (like I wanted to change) but I wasn't real quiet either."
NOT CHANGED: "I wanted to change by doing all my work and handing it in on time, but didn't."

CHANGED: "Not worrying about flunking tests or failing at things. Not worrying that my friends are getting better grades than me. Less afraid to try new things. Less sensitive about things people might tease me about. Listening to others. Getting work done on time. Expressing emotions. Learned how to talk to someone with a problem."
NOT CHANGED: "Talking in large groups. Being more organized. Doing well in math."

CHANGED: "I know how to talk to someone with a problem: active listening and not so many roadblocks."

I think it is plain from these evaluations that the major goals of the interpersonal relations training class were accomplished by all the students who remained with the group to the end (two dropped out and one became ill during the term). I still receive repeated requests from these students to have another class or group, and teachers frequently comment concerning how much the students have improved in class interactions.

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MEASURING THE PROGRESS AND ACHIEVEMENT OF THE GIFTED CHILD

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Much attention has been focused on the assessment of gifted children for the purpose of identification and placement. However, the field of education of the gifted has been sorely lacking in attempts to develop procedures for evaluating the success of these children in achieving the goals and objectives outlined by programs for the gifted. The lack of evaluative instruments is not surprising in view of the many problems relating to curriculum development which have taken precedence in the development of programs for the gifted.

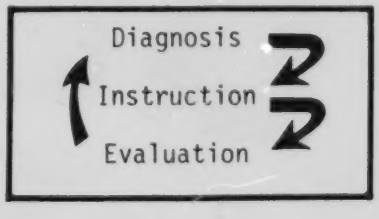
However, we must become acutely aware that students--particularly gifted students--are sensitized to feedback and judgements of their work and look to teachers for that information. In fact, regardless of what we say our goals and objectives of a program might be, our evaluation procedures reveal to students what our real goals and objectives are. It is thus imperative that our evaluation of gifted students should relate very closely to the goals and objectives of the program. Unfortunately, the nature of gifted programs in and of themselves makes this an even more difficult task than that faced by the regular classroom teacher. The complex levels of thinking demanded and the highly individual outcomes, for example, make evaluation of the gifted student a unique undertaking.

GRADING OR EVALUATING GIFTED STUDENTS

In assessing pupil growth in programs for the gifted and talented there are several issues which may be debated and several dimensions of evaluation which must be considered in order to fully appreciate the scope of the problem.

One major problem which constantly surfaces is the issue of the purpose of pupil evaluation in the programs and their relationship to grades. Let me openly take the position that grades are inappropriate for all programs for the gifted and talented. I will take the position that evaluation of pupil growth serves a greater purpose than placing a stamp of approval or rejection on a student. There are a number of reasons for taking this position. (1) The processes which we attend to in programs for gifted and talented are not easily quantifiable. (2) Most often programs for the gifted and talented focus (and rightly so) on individual needs and differences, thus prohibiting both comparative grading and criterion-referenced grading.

Let me present my own personal model of instruction in order to illustrate a productive role for student evaluation, as I see it, in programs for gifted and talented. This model should be interpreted as specific to each child in the program. In this case,



evaluation serves as both feedback to student, parent, and teacher and as part of the diagnostic process for determining where the student will go next. Good instructional planning depends heavily on the use of reliable data about the students' past accomplishments, learning styles, interests and needs. What better source of information about the students' accomplishments than evaluation data from previous instructors?

DIMENSIONS OF THE EVALUATION PROCESS FOR GIFTED STUDENTS

The process of evaluating gifted students is highly dependent upon the position of the program along each of many dimensions of program planning, focus and objectives. These dimensions include: content vs. product, affective vs. cognitive, and common goals and objectives vs. individual student goals and objectives. The degree to which a program tends to move to one or another ends of each continuum should influence and affect its evaluation procedures.

Content vs. Product Approaches. Some gifted programs have focused on content as the major aim of their instruction. Such programs may be either acceleration programs or enrichment programs which involve introducing students to more content areas than found in the regular classroom. Such programs might elect to assess through traditional assessment means since the content and approach remain traditional. However, programs which take a relatively "content-free" approach or who use a wide variety of content to teach a series of thinking processes will be hard pressed to find traditional measures of these constructs. Several instruments such as the Watson-Glaser Appraisal and the Ross Test of Higher Cognitive Processes have made beginning efforts at assessing these skills. (See Appendix B for a more complete listing of such instruments.)

The Affective vs. the Cognitive Dimension. Another dimension which must be considered falls along the cognitive/affective continuum. In gifted programs we have been stressing the need to attend to the affective dimensions of a child's growth as well as the cognitive aspects of his/her growth. In fact, it has been pointed out by B. O. Smith that we are always influencing the child's affective development no matter what we are teaching. That is, ". . . to teach any concept, principle or theory is to teach not only for its comprehension, but also for an attitude toward it--the acceptance or rejection of it as useful, dependable, and so forth." (Smith, 1966, p. 53.) Our own approaches to content reflect our values and attitudes. Even our choice of content reflects these values. However, very little has been done to attend to assessing the affective development of gifted and talented students. And we have been teaching values clarification for years with no idea of the impact such instruction has had on the student. Example: A senior at a large high school outside of Detroit informed me during an interview that she was tired of having the same values clarified and reclarified every year in every social science or English course she took! It thus behooves us to begin attending to these affective outcomes not only in our programs but also in our assessment of the students.

Certain models of gifted programs (notably the Enrichment Triad Model by Renzulli (1976) suggest that there are other non-cognitive factors to consider, such as task commitment. Renzulli has pointed out that the truly exceptional individuals in society are characterized by a great motivation to complete their tasks. As part of his model he suggests that we

should identify students with high task commitment. Another approach to the model might be to attempt to develop task commitment in the student. In either case, it would seem to be necessary to assess student growth in this area, if in fact we consider it to be a factor in the development of gifted and talented students.

Common Goals and Objectives vs. Individual Student Goals and Objectives. The Enrichment Triad Model also suggests that there is another variable to consider in assessing the students' achievements. That is, are they all working toward the same goals and thus subject to the same types of evaluation using the same instruments, or are they all striving toward widely diverse types of evaluation? Some programs may have an element of both types of goals. An example of the type of instrument which might be used for an individual project is found in Figure 1 (Renzulli, 1974).

TYPES OF MEASUREMENT AND SOURCES OF DATA

In evaluating gifted students, we must abandon the notion that traditional paper and pencil tests will fill all of our needs. Rather, we must look for many sources of information. Although many tests may be available to meet specific needs (see Appendix B), do not feel that you must be limited to such tests. Consider the matrix below as a model for conceiving new ways of assessing gifted students.

The most important factor to keep in mind in assessing the gifted student is the reliability and validity of any instrument you choose. It should measure what you want to measure as directly as possible and have as little random error as possible.

Examples of instruments other than tests which have been used to evaluate G/T students are given in Appendix A.

Figure 1

ALPHA PROJECT – EVALUATION OF STUDENT GROWTH

NAME _____ GRADE _____

TEACHER _____ SCHOOL _____

AREAS OF STUDY (Check all that apply)

__ Language Arts/Humanities __ Science __ Personal and Social Development

__ Social Studies __ Music __ Other (Specify) _____

__ Mathematics __ Art __ Other (Specify) _____

Brief Description of The Content of The Study _____

_____

Beginning Date _____ Ending Date _____ Number of Days ____

OBJECTIVES (List in order of importance)

1. _____
2. _____
3. _____
4. _____
5. _____

COGNITIVE OBJECTIVES Check the highest level for each written objective

	1	2	3	4	5	6
	Knowing / Remembering	Comprehension: Translating, Interpreting, Extrapolating	Application (of learned material to concrete situations)	Analyzing (breaking down into component parts)	Synthesizing, Creating	Evaluating, Judging
1.						
2.						
3.						
4.						
5.						

AFFECTIVE OBJECTIVES Check all that apply

	A	B	C
	Developing interest in and commitment to a topic, area of study or learning in general	Developing skills that lead to better relations between people	Developing attitudes and values toward ideas, causes, social issues, etc.
1.			
2.			
3.			
4.			
5.			

ACCOMPLISHMENT OF OBJECTIVES

In the spaces below please indicate the degree to which you think each objective has been accomplished by:

1. Placing a check mark (✓) in the appropriate space for the cognitive objective.
2. Placing the corresponding letters (A,B,C) in the appropriate spaces for each of the affective objectives.

	Not At All	A Little	About Half	A Great Deal	Completely
1.					
2.					
3.					
4.					
5.					

ACTIVITIES (Briefly list what the student did to accomplish these objectives. Underline any activity that you consider to be relatively unique)

RESOURCES (Reference Books, Films, People, Etc.)

PRODUCT (Briefly describe any projects, stories, plays, filmstrips, etc. that resulted from this study. Attach samples if available.)

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Sponsored by; Superintendent Of Public Instruction - State Of Washington

Type of Instrument

Source of Evaluation Data	Rating Scaled	Checklist	Contract	Test	Observation	Anecdotal Reports
Parent						
Student						
G/T Teacher						
Regular Classroom Teacher						
Mentor						

INSTRUMENT FOR RATING
STUDENT PRODUCTS IN REGARD TO DATA-GATHERING AND
DATA-REPORTING SKILLS
TO BE USED WITH STUDENTS IN
MICHIGAN'S SECTION 47 PROGRAM

Project Objective No. 4: 80% of a random sampling of the students involved in the pilot programs will attain a satisfactory score on a scale designed to ascertain students' ability to gather and report data, when a student product is rated on the scale by the student's project director or teacher.

Directions: The scale is designed to be used to evaluate a student project that involved gathering information or data and presenting these in the form of a written--or possibly oral--report. The presentation is to be evaluated by the student's teacher or project director. Each item on the scale is worth five points. The expectation is that 80% of the students whose products are rated on this scale will attain a score of 45 points or better on the total scale. (The scale may also be used by a panel of judges, in which case the average scores of the judges may be used to compute the scores.)

1. To what extent did the student appropriately focus (narrow down, broaden, etc.) the topic being examined?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

2. To what extent did the student clearly define the topic being examined?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

3. To what extent has the student used more than a single source of information in gathering data for the project?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

4. To what extent were the sources of information the student used appropriate for the topic?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

5. To what extent did the student appropriately paraphrase the information gathered in making the final presentation?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

6. To what extent has the student appropriately synthesized the data collected and presented it in a meaningful "whole"?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

7. To what extent did the student make appropriate generalizations on the basis of the information presented?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

8. To what extent did the student make appropriate interpretations of the information gathered?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

9. To what extent did the student present appropriate concluding or summary statements of the information presented?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

10. To what extent did the product seem to reflect the student's real interest in the topic?

5	4	3	2	1
To a great extent		Somewhat		To a very limited extent

SOUTH BOSTON PUBLIC SCHOOLS

TITLE IV-C RENAISSANCE OF THE GIFTED

TEACHER EVALUATION OF PUPIL

Pupil	Teacher	Date

Please evaluate this pupil by placing the letter a, b, c, d, e on the line following each item according to the scale below. Think of him in relation to his performance at the start of the program.

(a) Marked loss
(b) Diminishing
(c) About the same
(d) Increasing
(e) Marked increase

1. Ability to solve problems . . . . . _____
2. Knowledge of subject matter areas . . . . . _____
3. Interest in school . . . . . _____
4. Ability to think in terms of the whole and to see parts in relation to the whole . . . . . _____
5. Research skills . . . . . _____
6. Ability to work independently . . . . . _____
7. Status in peer group . . . . . _____
8. Rapport with teacher . . . . . _____
9. Critical thinking ability . . . . . _____
10. Motivation toward learning . . . . . _____
11. Knowledge of basic skills (fundamentals) . . . . . _____
12. Intellectual curiosity . . . . . _____
13. Ability to accept responsibility . . . . . _____
14. Opportunity to create and experiment with ideas and things . . . _____
15. Self-understanding . . . . . _____
16. Acceptance of leadership roles . . . . . _____

MARYLAND SUMMER PROGRAMS FOR THE GIFTED AND TALENTED

STUDENT EVALUATION FORM

COGNITIVE AREAS SPECIFY SUBJECT _____

Student's Name _____ Age ____ Sex: M F Center _____

Session ____ Evaluator _____ Position _____ Date _____

Criteria		Average or Below	Above Average	Superior for Age Group	Superior for any Age Group	Genius or Truly Rare Talent
I. Content Knowledge:	A. Entry Level Knowledge in Specific Area					
	B. Acquired Knowledge in Specific Area					
II. Critical and Analytical Thinking Skills:						
	A. Ability to Perceive a Problem					
	B. Ability to Systematically Seek a Solution to a Problem					
	C. Ability to Ask Original Questions Which Generate New Problems					
	D. Ability to Generalize					
	E. Ability to Apply New Information to Different Situations					
III. Attitude/Aptitude:	A. Motivation for Specific Area					
	B. Intellectual Curiosity					
	C. Ability to Work Independently					
	Column Total					

MARYLAND SUMMER PROGRAMS FOR THE GIFTED AND TALENTED

STUDENT EVALUATION FORM

MUSIC

Check One: _____ Jazz Band
_____ Chorus
_____ Orchestra

Student's Name_____ Age____ Sex: M F Center_____

Session_____ Evaluator _____ Position _____ Date_____

Criteria	Average or Below	Above Average	Superior for Age Group	Almost Professional Quality	Genius or Truly Rare Talent
I. Sight Reading Ability					
II. Sense of Rhythm					
III. Quality of Tone Production					
IV. Artistic Interpretation or Style					
V. Projection and Articulation					
VI. Blending of Voice or Instrument to Group					
VII. Responsiveness to Conductor or Leader					
VIII. Ability to Create Own Melodies, Tunes, Harmony, Compositions, etc.					
Column Total					
Weight					
Weighted Column Total					
				Total Score	

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252 Bloor Street West
Toronto 5, Ontario

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Education Building
University of Illinois
Urbana, IL 61801

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Cornell University
Stone Hall
Ithaca, N.Y. 14850

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SIMULATIONS - BRINGING REAL LIFE TO THE CLASSROOM

Marilyn W. Bos

Teacher

Superior Learner Program

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Educators have recognized the value of games and role-playing in the classroom. Direct experiencing through sampling the actual processes of social and economic life through real work or problem solving is necessary within the social studies curriculum for the gifted (1). Understanding human motivation and behavior through studying people, as individuals and as groups, should form part of the core curriculum for these students (2). Simulations combine games and role-playing with the curriculum needs of the gifted to add a new dimension to the classroom. Students who use simulations become actively involved in a meaningful learning process that lessens the gulf between school and the life outside.

A simulation is a method of representing the essential aspects of a real-life situation and usually presents a problem that must be resolved (3). Students take the roles of the people involved in this situation and, with carefully constructed guidelines, try to reach the goals established for those individuals or groups. An evaluation period provides information for the teacher about the learnings that took place.

Simulations can make the classroom more interesting for students of all age and ability levels. There is high motivational value because there is a useful reason to learn. Increased skill in decision-making and in differentiating between fact and opinion can be stressed. Students are encouraged to make commitments and to act upon them. They examine beliefs and values and learn to be tolerant of others. Higher levels of thinking are promoted. With their penchant for exploring beyond facts and seeking explanations and value judgments, gifted students must be taught utilization of all their thinking processes, important ideas about all aspects of their life and times, and methods for becoming independent learners (4). Simulations can help teachers of the gifted meet this challenge.

Using a simulation requires careful planning by the teacher. The concepts you select must be clearly determined and based on reality. An element of the dramatic should be present. If there are to be winners and losers, rules are needed. Role specifications and goals must be understood by the students.

Because of the preparation time involved, many teachers prefer to use the wide variety of commercially prepared simulations available from such companies as:

INTERACT, P.O. Box 262, Lakeside, California

Games, Central and Abt Associates, 55 Wheeler Street
Cambridge, Massachusetts 02138

Simile II, 1150 Silverado, P.O. Box 1023, La Jolla, California

These companies have simulations that vary widely in cost and elaborateness. They will provide current publications lists upon request.

The teacher should review a pre-planned simulation carefully to be certain that it is appropriate for the class. Ask yourself questions such as:

Are the desired concepts present?
Will it motivate my class?
Is it suitable for the ability levels in my class?
Does the game have time or space limitations that I cannot overcome?
Could I develop a game to better meet my needs, at less cost?

If you decide to buy the game, try it out with a colleague after you have become familiar with it. Many little difficulties can be ironed out ahead of time.

Developing your own simulation has many advantages that offset the disadvantage of extensive planning time. You can pick the subject matter. You know the ability of your students. You can design it to fit your time and space limitations. Most importantly, you will be fully familiar with every aspect of the simulation (5).

Following this article are two sets of guidelines that may help you set up a simulation of your own. The first was devised by Avis Reid in her book, Turn to Page 84. Its simple format allows the teacher to get a summary of ideas on one page for easy reference. You may wish to add a category as no mention is made of total game time. Jane Taylor's questions following each of her eight steps aid the teacher in preparing fully for all aspects of the simulation. The most important aspect of any simulation is the evaluation or de-briefing time. During this period, the teacher can lead the students in examining decisions and social attitudes. Analogies to other situations can be made. The evaluation time should be approximately one-quarter of the entire time of the simulation.

A successful simulation depends upon its power to motivate and its relevency. "Feelings, beliefs, ideas, and exciting action are waiting for you and your gifted students as you become involved in this playful way of learning-simulation" (6).

FOOTNOTES

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3. Robert C. Horn, The Guide to Simulations/Games for Education and Training, Cranford, New Jersey: Didactic Systems, Inc. p. 6.
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DESIGN YOUR OWN

(from Avis Reid's book, Turn to Page 84)

Name of the game: _____

Statement of the problem: _____

_____

Objectives of the game: _____

_____

Scenario: Include past events, background information, the present time and setting, conditions that may affect the game.

_____

Characters and their goals: Give brief description of the physical characteristics, the personality, and the player's goals for the game.

_____

A point in time: The exact time and place when the game begins.

_____

Resources: Props for the game--physical, social, economic, political or personal.

_____

Rules and their administration: To govern players, the game pattern and scoring and how they are implemented.

_____

Evaluation and feedback: Were the objectives reached? Can the game be improved?

_____

PLANNING A SIMULATION GAME

(From Jane Taylor's article in The Clearing House
"Developing Your Own Simulation Game," November, 1976)

1. Plan your objectives. What is it you want to get across to your students? What is your purpose? Are you teaching skills? Content? A combination of both? How will the class benefit? As a whole? As individuals?

2. Decide on a problem/situation. What type of subject matter are you dealing with? Are you presenting a real world problem, an imaginary situation or a hypothetical situation based on a real world situation? What would interest your students and motivate them to action?

3. Define the scope of the simulation. What are the time and space constraints of this topic? Would it be best set in the past, present or future? Should you simulate a large scale process or a smaller segment of it? How much class time will be allowed for the entire simulation?

4. Construct the roles. Does each role have its own unique characteristics? Do the roles interrelate in such a way that necessary or natural actions will be initiated? Are the roles realistic? How many roles need to be constructed? Does every role involve definite actions and participation? Which will be major roles and which will be minor roles? Why?

5. Identify participants goals. Does each player have particular goals? Will each player act individually or in groups to attain these goals? What resources will have to be sacrificed to reach these goals--time, money, subsistence, freedom? Are the final goals defined in terms of winning and losing? Should they be? Will the goals motivate player participation?

6. Write rules and teacher instructions. Are the teacher's instructions clearly defined? Are the player's rules easy to read and understand? Do they set forth the rules governing play in explicit wording? Are they too confining or do they allow a wide variance in player's actions?

7. Design any additional parts. What extra parts are needed? Money? Name tags? Role cards? Dice? Charts? Playing board? Chance cards? Which of these should be made before you begin? Should the students make them? Are they colorful and eye-appealing? Can they be easily read from a distance if necessary?

8. Develop a de-briefing. Have you allowed adequate time for de-briefing? What types of questions or activities will reinforce certain apsects of the simulation? What types of questions or activities will bring out the the students' true feelings as a result of the simulation? What can you build in to evaluate your original objectives in terms of learning outcomes? Have you given the students time to analyze critically the simulation and give you suggestions for its improvement?

PROJECT IMPROVE

A System for Identifying Gifted and Talented Students

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and
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Bureau of Educational Research
University of Connecticut
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The purpose of this system is to provide persons who are involved in the identification of gifted students with a comprehensive plan that will assist them in both the screening and the selection process. The system is designed (1) to take account of a variety of identification criteria, (2) tc minimize the amount of individual testing required, and (3) to show a relationship between the objectives of the program and the criteria upon which selection is based. The steps involved in identification should take place in the spring of the year before students are placed in the program. For students who are continuing in the program, the same procedure should be followed; however, test data should be updated and information should be obtained from special program teachers who have worked with the students during the preceding year. Screening and selection should be carried out by a committee consisting of teachers, administrators, and pupil personnel specialists.

Before the screening and selection system can be implemented, the following three decisions should be made:

1. How many students will be involved in the program?

2. What area or areas will the program focus upon? (Language arts, Science, etc.)

3. From what grade levels will the students be selected?

Once these basic program decisions have been made, the following steps should be followed:

PART I: SCREENING

Step A: Intelligence Test Information

Section A of the Screening and Selection Form should be completed for all students who are in the grade(s) below the grade(s) from which students will be selected for the program. In the very early stage of the screening process, all youngsters in these grades should be considered eligible for the program. This approach will minimize the chances of overlooking youngsters who do not earn a high evaluation on any one criterion, but who may be good candidates for the program when several criteria are looked at collectively. Each step in this identification system will be directed toward reducing the number of students who are eligible for the program.

If the program deals mainly with one or more of the traditional academic areas, a minimum group intelligence test score should be established. Any student who has scored at or above this cut-off point on any of his group intelligence tests should be continued in the screening process. A rationale for establishing this cut-off point might be as follows?

1. Decide how many students the program can accommodate and determine what proportion of the eligible students this figure represents.

   Example: $\frac{\text{Program can accommodate} = 300}{\text{No. of Students Eligible} = 3000} = 10\%$

2. Determine the observed means and standard deviations for intelligence scores for each grade level.

   Example: 4th grade mean for 1000 students = 105, S.D. = 12
   5th grade mean for 1000 students = 100, S.D. = 15
   6th grade mean for 1000 students = 95, S.D. = 18

3. Refer to a table of proportions under the normal distribution curve and determine the Z-value that marks off the top 10 percent of a normal population.

   Example: 10% of a normal population falls above a Z-value of 1.28

4. Determine the cut-off scores by a. multiplying the Z-value by the observed standard deviations, and b. adding these figures to the observed means.

   Example: The top 10% in 4th grade will earn a score of

   120.36 or better
   1.28 x 12 = 15.36
   15.36 + 105 = 120.36

   5th grade = 119.26
   6th grade = 118.04

Because of errors in measurements that are inherent in group measures, and because some youngsters simply do not demonstrate their best performance in group testing situations, an individual intelligence test should be administered to all students who score five or less points below the group test cut-off score. Because of the cultural inequalities in intelligence tests, minority group students and students coming from low socio-economic backgrounds who score fifteen or less points below the cut-off score also should be given an individual test. Since individual intelligence tests are also culture bound, the subjective judgment of the psychologist should be used in interpreting test performance for minority group and low socio-economic youngsters.

Scores from intelligence tests should rarely, if ever, be used as the only criteria for admission to a program for the gifted. This is especially true if the program focuses upon the development of non-academic talents such as art, music, leadership, drama, and creativity. If the program does focus on one or more of the traditional academic areas, students with unusually high scores can usually be recommended for the program without further consideration of additional information. With the exception of students who are unusually low in intelligence, a good rule to follow is that NO CHILD SHOULD BE EXCLUDED FROM THE PROGRAM SOLELY ON THE BASIS OF INTELLIGENCE TEST RESULTS.

If the program deals with developing the creative potential which is present in all youngsters, or with special aptitudes and talents such as music, mechanics, drama, etc., Steps A and B should be skipped and screening and selection should focus on Steps C, D and E.

Action Based on Step A

After all intelligence information has been gathered for students who are eligible for a program that deals with one or more of the traditional academic areas and cut-off points have been established, the following decisions can be made:

1. Students who score ten or more points above the cut-off score should be recommended for placement in the program.

2. Students who score ten or more points below the cut-off score should not be recommended for placement in the program.

3. All other students should be continued in the screening process.

Step B: Achievement Information

If the program deals with one or more of the traditional academic areas, Section B of the Screening and Selection Form should be completed for all eligible students who have been continued in the identification process. Section B points out each student's best area(s) of performance, and this information should be carefully considered when the program focuses on a particular academic area. For example, if the program is designed to develop advanced levels of proficiency in science, then special consideration should be given to students who have demonstrated high performance in this area. If a variety of special program offerings are available, but space or scheduling problems prohibit enrollment in more than one area, student interest should be respected, and, if necessary, interviews with a guidance counselor should be arranged to help students clarify their interests.

At this point, the screening and selection committee should have a fairly good idea about which students are the best achievers, but whenever there is some doubt about a student's past performance, the information required in Step C should be gathered.

Special consideration should be given to students who score unusually high on intelligence tests, but who display poor performance on achievement tests and/or course grades. These youngsters may be bored by a curriculum which has failed to challenge their superior abilities, and this lack of challenge sometimes causes them to have discipline problems in the regular classroom. A special program may be the best way to renew these students' interest in learning.

Action Based on Step B

Because of variations in student motivation, different standards in grading practices, and the frequent lack of relationship between course content and standardized achievement tests, decisions based on Step 2 should be approached with great caution. Whenever there is any doubt about a student's motivation and ability to accomplish work in the special program the additional information suggested in Step C should be gathered. With these cautions in mind, the following action might be based on Step B.

1. Students who have unusually high achievement in the area(s) with which the special program will deal should be recommended for placement.

2. Students with unusually low achievement should not be recommended for placement. (Note above caution about students who have high intelligence scores but low achievement test scores and course grades.) Students who are eliminated at this step may be nominated later as a special recommendation.

3. All other students should be continued in the screening process.

Step C: Teacher Judgment

A Scale for Rating the Behavioral Characteristics of Superior Student (SRBCSS) should be completed for all students who have not yet been selected for the program. This scale was designed to serve as a guide for teacher judgment in the areas of learning, motivation, creativity, and leadership. The score from this scale should be recorded in Section C of the Screening and Selection Form. The mean scores of the four separate scales of the SRBCSS should be computed and the comments of teachers should be carefully considered.

Action Based on Step C

1. Students with the highest scores on the SRBCSS or other rating scales should be considered for placement in the special program.

2. Remaining students should not be recommended for placement unless they are nominated in Section D.

Step D: Special Nominations

After a final list has been compiled, the list should be circulated to teachers from the sending classes and they should be allowed to make special nominations for any students who are not on the list but who they feel should be given further consideration. Teachers should meet with the screening and placement committee and be given an opportunity to make a case for their special nominations. Whenever a child is not placed in the special program, a brief statement which summarizes the reasons for not being placed should be sent to the teacher who nominated the child.

Step E: Special Aptitudes and Talents

Whenever a program deals with the development of special aptitudes and talents, the screening and selection process should show a close relationship between the ability being developed and the criteria which are used for identification. In other words, if the program is mainly directed toward the development of general creativity, then tests of this aptitude should be given primary consideration in the identification process. If the program deals with the development of talents such as art, drama, or music, then persons who are qualified to make judgments in these areas should conduct auditions and/or review samples of students' work.

Because of the limited number of objective instruments for measuring various kinds of talents in the fine arts, a good deal of the criteria for selection in these areas will have to depend on the subjective judgment of experts. Some instruments are available for measuring specific abilities, such as mechanical aptitude, judgment for design, physical dexterity, etc., and current listings of instruments in these areas should be reviewed as a possible source of identification criteria.

PART II: SELECTION

At the conclusion of Step D (or Step E if the progress deals with special aptitudes or talents), the Summary box on the first page of the Screening and Selection Form should be completed and all students who have been recommended in one of the screening steps should be reviewed by the screening and selection committee. In most cases, the list of students recommended for the program will exceed the number of students that the program can accommodate, and the major task in selection will be to trim the list down to the desired number. In addition to certain practical considerations, such as balance between boys and girls, geographic locations of students, scheduling, etc., some general guidelines can be used to assist in making the final decision.

The most important consideration is to achieve a balance among the various types of students who have been recommended. A good idea is to arrange the groups in such a way that they contain some high IQ students, some high achievers, and some students who have received high ratings in motivation, creativity, and leadership. This approach may cause the committee to eliminate some high IQ or high achievement students in favor of students who are lower in these abilities but high in characteristics that will be important to the overall functioning of the group. The result will be a more heterogeneous group that can profit from each other and that can engage in activities that require a cooperative blend of various abilities.

A second guideline in making the final selection is to consider which students might suffer adverse effects from participating in a program that requires high performance. Some students do not adjust well to the heightened competition that is almost always present in programs that bring together highly able youngsters, and for this reason, it may be wise to eliminate students whose participation in the program will place them under undue pressure.

SUMMARY

_____Placement Recommended in Section_____

_____Placement not Recommended in Section_____

PROJECT IMPROVE

Screening and Selection Form
for Identifying Gifted Students

Joseph S. Renzulli, 1971

Name_____ Date of Birth_____
Year Month Day

School_____ Grade_____

Teacher_____ Sex_____

Section A: Intelligence Test Information

1. Group Intelligence Tests

Date	Grade	Name of Test	Verbal Score	Non-Verbal Score	Total Score

Based on the above information and the established cut-off score of _____, the following action is recommended:

_____Placement in the program is recommended.

_____An individual intelligence test should be administered.

_____Additional information is needed (proceed to Section B).

_____Placement is not recommended at this time.

2. Individual Intelligence Tests

Date	Grade	Name of Test	Verbal Score	Non-Verbal Score	Total Score

Attach report of examiner.

Based on the above information, the following action is recommended:

_____Placement in the program is recommended.

_____Additional information is needed (proceed to Section B).

_____Placement is not recommended at this time.

Comments:

Section B: Achievement Information

1. Achievement Tests

Date	Grade	Name of Test	Reading G.E.	Reading %ile	Lang. Total G.E.	Lang. Total %ile	Arith. Total G.E.	Arith. Total %ile	Soc. Stud. G.E.	Soc. Stud. %ile	Committee G.E.	Committee %ile

G.E. = Grade Equivalent

Circle all scores that are two or more years above grade level and/or above the 90th percentile.

Student's best area(s) of achievement_____

Student's poorest area(s) of achievement_____

2. End-of-Year Grades

Date	Grade	Teacher	Reading	Arith.	Lang Arts	Social Studies	Science

Attach relevant comments regarding achievement from permanent record.

Student's best area(s) of performance_____

Student's poorest area(s) of performance_____

Based on the information from Sections A and B, the following action is recommended:

_____Placement in program in the area(s) of_____ is recommended.

_____Additional information is needed (proceed to Section C).

_____Placement is not recommended at this time.

Section C: Guided Teacher Judgment

1. Scale for Rating the Behavioral Characteristics of Superior Student (see Exceptional Children, Vol. 38, November, 1971)

Date	Grade	Teacher	Learning	Motivation	Creativity	Leadership

Mean Score for Group:_____

2. Other Relating Scale Information (Specify)

Based on the information from Section A, B, and C, the following action is recommended:

_____Placement in the program is recommended.

_____Additional information is needed in the form of:

_____

_____Placement is not recommended at this time.

Section D: Special Nominations

In the space below, summarize the comments of teachers if this child is a special nomination:

Based on the above comments, and in view of the information provided in Section A, B, and C, the following action is recommended:

_____Placement in the program is recommended.

_____Additional information is needed in the form of:

_____

_____Placement is not recommended at this time.

Section E: Special Aptitudes and Talents

1. Tests and Rating Scales of Special Aptitudes and Talents

Date	Name of Test	Results

2. Summary of Results from Auditions or Evaluations or Products or Performance.
Person making evaluation_____

Based on the above information, the following action is recommended:

_____Placement in the program is recommended.

_____Additional information is needed in the form of:

_____

_____Placement is not recommended at this time.

ADDING A GIFTED AND TALENTED PROGRAM: WORKING OUT THE CHANGE PROCESS

Dr. Sarah L. Engel

Executive Director

Insight, Inc.

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Schools are dynamic organizations. That is to say, they are constantly in a state of change. New programs and curricula, increased or decreased enrollment, new state regulations, changes in administration, new school board members, shifts in racial distribution, staff turnover, building programs are but a few of the changes effecting school systems throughout the country.

In some cases these changes are the result of a full scale planning effort involving various segments of the greater school community in a creative problem solving process. More often, however, the changes come about through crises, inadequate or short-sighted planning, serendipity or organizational drift. Needless to say, changes which fall in this latter category do not have a high probability of success. Changes which are not thoroughly planned, in which the alternatives and consequences have not been fully examined, which have been poorly communicated and/or which have not taken into consideration the impact of the change on the total school community run the risk of being undermined, causing polarization, and/or being met with anger, resentment or apathy. Ultimately, these unplanned changes are either mediocre or dropped at best, or implemented poorly and inadequately at worst.

The concept of providing the best possible education for each individual youngster has broadened considerably in the past several years. This has been caused in part by the strong focus on educating the special child. Included in many state regulations, which are tied in with fiscal allocations, are mandates for educating the mentally retarded, the learning disabled, the handicapped, the emotionally disturbed, the gifted, and the talented. Unfortunately, these states have not been, in many cases, as supportive as they might with regard to funding or assisting in the planning for these new programs. Therefore, it has been left up to each individual school district to prioritize, arrange funding for, educate the school community on, implement, and evaluate these new programs.

What follows is one process that a school district might utilize in planning for the addition of a new program to its system - specifically in this case, a program for gifted and talented students. While there are other processes or variations which might be considered, attention to some degree to each of the outlined steps would seem prerequisite to a thoughtful planning process with a high probability of success.

COMMITMENT

The key person in planning, developing, implementing and evaluating a gifted and talented program is the district superintendent. Unless the superintendent is fully committed to the concept of providing special instruction and opportunities for the gifted and/or talented students, the program has little chance of success.

The superintendent will be the person dealing with the community, School Board, teachers, administrators, etc., and thus will be central to whatever process is developed. His/her first step, therefore, would be to

educate him/herself thoroughly on various topics relating to gifted/talented programs - recent literature, existing programs, philosophy, cost, etc. He/she would then be prepared to facilitate necessary organizational decisions.

ORGANIZATIONAL DECISIONS

The next step is to educate the central office building administrators and other key personnel regarding possibilities and limitations for such a program within that particular district, and then begin a creative problem solving process which would deal with such issues as criteria, exceptions, structure and time frame.

The first decision which must be made is whether the district will provide programming for gifted students, talented students or both. Secondly, the criteria for determining eligible students must be developed as well as how exceptions will be handled. Thirdly, the structure of the program must be worked out. That is, questions such as are the students going to receive special instruction within their own classroom, will they be taken out of their classroom and, if so, how often and to what location; or will there be a sufficient number of students to justify one class per grade of these special students, must be addressed.

Next must come the decision of staffing - will the existing staff take responsibility for the program, and if so, how will they be selected and trained, or will it be necessary to hire additional staff? Finally, a realistic time frame has to be developed, both long and short range.

SCHOOL BOARD

Once the administrators have outlined a workable process, the School Board members must be educated and informed, and their input sought. The administrators could be of valuable assistance to the superintendent at this stage by acting in an advisory capacity for the Board members. The approval, support, and thorough understanding of the concept and process by the School Board is of central importance to the success of the program.

DISTRICT STAFF

After the School Board has voiced approval, the next group to become involved is the district staff. Initially, they must understand the rationale and limitations of adding a gifted/talented program to their district. However, the process decided upon by the administrators should not be presented to the staff as a fait-accompli, but rather as a guideline so that the staff will have a genuine opportunity for input into the process. This will ensure that the district personnel have a very real voice in determining various aspects of the program rather than give token acceptance. The superintendent and other administrators are advised at this point to be as flexible as possible in listening to the questions and concerns of the staff. The importance of their support of the program is perhaps second only to that of the superintendent. It is critical, then, that each member of the professional and non-professional staff understand exactly how the addition of this program will affect him or her as as an individual.

From among the staff will emerge three distinct groups who will each need specific attention. Those professionals who will be spending most or all of their time with the gifted/talented students should be afforded maximum input into the curriculum and evaluation components of the program. Also, it is particularly important that the administrators and teachers share a clear understanding of one another's expectations regarding all phases of the process. This would include such areas as how the teachers were selected, additional compensation, available training, time frame, ways to deal with exceptions, evaluation, administrative support, program content, etc.

A second group will be those professionals who will be spending a part of their time with these special students, such as counselors, special subject teachers and the like. This group will also have to understand clearly what their role in the process is, what is expected of them, and what assistance they can expect.

Finally, there is the group who will not be involved with the gifted/talented students at all, or who will not be involved in the instruction of these students. Unfortunately, it is this group who is most often at the source of problems related to gifted/talented programs, and, therefore, must not be left out of the process. Typically, these professionals experience a degree of jealousy or resentment at not being selected for the program and consequently seek to undermine the process. It is essential then, that the administration develop an appropriate role in the process for this group, hopefully in a decision-making capacity.

COMMUNITY

Before the process if finalized, it is critical that input from the community is sought. By and large, community members are more willing to accept any change in the school program if 1) they have been informed, and 2) they have been given an opportunity to express their feelings.

Like the staff, the community will also have distinguishable subgroups. The most obvious group will be those parents of the children chosen for the gifted/talented program. These parents must be educated as to the program philosophy, program content, why their child was chosen, how flexible is the mobility structure, what they can expect from the program, and what role they might best play. It should not be assumed that every parent will be delighted to find their child has been selected for the program; therefore, after receiving a comprehensive overview of the program, they should be given the option of not having their child included.

A second community group will be comprised of those parents whose children were not chosen for the program. Most of the parents in this group will remain somewhat indifferent to the process; however, there will be the few who will be disappointed or even angered that their children were not selected. These few should not be ignored nor dismissed as malcontents, but must have the program rationale and selection process explained to them in detail. They must be told in a straightforward manner whether their child could be considered an exception and gain future acceptance into the program or if not, these parents must understand how the standard school program will continue to meet their child's individual needs.

A final community group is the non-parent taxpayers. This group is most often upset by new programs which increase the school's budget, and, therefore, must be educated as to the value of a gifted/talented program.

STUDENTS

A group very often neglected during the planning process for change is the students. Most students have a fairly good grasp of the effectiveness of their educational program, and often have viable suggestions for change. Therefore, to ignore their input is to waste a valuable resource.

In the case of adding a gifted/talented program to a district, those students who have been selected should understand, in the same manner as their parents, how they were selected, what the program rationale is, what the program content will be like, what they can expect from the program and exactly what is expected of them. This explanation and request for suggestions should include all selected students, from the first grade up. The discussion environment should be structured in such a way as to make it comfortable for these students to air any concerns they may have about being part of a special program. These concerns are critical data, and workable responses should be available.

Also, those students who were not selected must understand both the program and selection process. This group will also have important concerns, depending on their grade level, about the gifted/talented program and especially how it relates to the program they are currently receiving. These concerns must also be addressed by the teachers and administrators so that feelings of being left our or discriminated against are kept to a minimum.

EVALUATION

It is essential that an evaluation procedure be set up in advance to determine the level of success of any new program. Once all phases of the program have been finalized, long and short range goals must be established, taking into consideration the expectations of all concerned. Along with these goals should be a methodology for evaluating their success. Both long and short term evaluations are desirable, and they should include input from the professional staff, administrators, community and students. Provisions should be made for making any changes indicated as a result of the evaluations. Also, it is desirable to make the evaluation results public so as to minimize charges of data manipulation.

SUMMARY

Whenever change is introduced into a system, that change has a higher probability of success if there has been an extensive planning process beforehand. This process includes a thorough knowledge of the area considered by the key people, straightforward, timely, and open communication about the program to all concerned, input solicited from as many groups and at as many stages as possible, opportunities for various groups to give feedback once the process is instituted, a structured evaluation procedure and provisions for making indicated changes.

FUTURE STUDIES:
EXPLORING AND CREATING

Ann Washington

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THE FUTURE IS . . .

A thought in my mind,
A thought in which I can't leave behind.
A shock, a rock, on my head,
It's a problem of the present.

Malaika King/Grade 4
Title IV-C Field Lighthouse Program
Norfolk City Public Schools
Norfolk, Virginia

Are we preparing our students to live in tomorrow's world or is our curriculum today disproportionately directed to events and ideas that no longer exist? Do we continue to perpetuate a "reactive" point of view in dealing with problems of today, or will we provide the opportunity for our students to become "pro-active", anticipating changes and events in order to plan and control our future?

Children have a natural inclination to inquire, to delve into problems and ideas, to visualize and dream about things that have never happened. Their inquiry into the "what if" is an expression of a child's flexibility of thinking in order to seek alternatives to a situation. Providing a student with the opportunity to express his curiosity, imagination, and capacity to cope with complexity, not only encourages a student to envision a future, but the opportunity promotes an enthusiastic, high involvement and positive attitude toward oneself and learning.

A Future's curriculum has broad educational significance due to the increased awareness students gain concerning the future consequence of today's decisions, anticipated needs, alternative solutions to problems and ideas, and the effect of planning on human activities. Confronting students daily with biological, technological and societal changes occurring so rapidly in our world today facilitates one's ability to adapt to these changes, to take advantage of the opportunities change present and to develop desirable alternatives in dealing with problems in order to influence change.

Looking Ahead to Tomorrow: Alternative Life-Styles for the Future - was a six-week unit developed by six teachers, K-6, in the Norfolk Public Schools, Programs for the Gifted and Talented Office. Since these teachers meet with their students only one day each week, the unit was necessarily more compact, but an integral part of the social studies, math, science, and language arts curriculum. Indeed, a study of the future is adaptable to all ability levels and ideally, all subject areas can incorporate ideas and activities concerning our future during the entire school year.

We began our Future Study with a letter to the parents, advising them of the Future curriculum and requesting active interest and support of their child's independent research project and outside reading. Students were required to keep all class activity worksheets, readings, science fiction book reviews, creative writings and news articles in a special notebook for optional display, along with their independent projects, at a shopping center, the Public Library,

and City Hall. The sample of activities which follow were successfully utilized in encouraging students to develop awareness of their ability to cope with complex problems and ideas, delve into a variety of ideas in order to seek alternatives, visualize and build mental images of the future.

Activity 1: Coping with Complexity

Activities which are deliberately ambiguous and open-ended encourage flexible and original thinking in seeking alternatives and seeing relationships between how things are and how they could be. Ambiguity forces decision making and that is a person's first step in taking responsibility for his own future. The following examples from Essence (see Bibliography) provide an excellent introduction to inventive and creative thinking, encouraging the student to break with conventional thought and perceptual patterns.

1. Take familiar objects from the environment; invent, and demonstrate a new use or uses for each of them. This activity gives students that too often rare opportunity to express concretely and/or abstractly creative solutions to "what is". It encourages inventiveness and problem solving. A similar activity would be to determine the accepted function of a social institution and invent a new function for it.

2. Go outside and find two things -- one of which is responsible for the other. Sketch, photograph or in some other way visually describe this cause and effect relationship. This exercise will help to illustrate how events or changes in one area of the environment effect other areas. It can lead to a multi-causal flow chart in which causes and effects of commonplace situations or more serious issues affecting our world can be examined.

3. Go outside and find a series of events such that the first is related to the second, the second to the third, and so on. However, the last event should appear to have no causal relationship to the first. Represent these events using some visual medium. This exercise will help to illustrate the concept of interrelationships and the interdependence of events, ideas and issues.

Activity 2: Forced Relationships

This activity is designed to encourage an attitude of self-confidence in one's ability to be deliberately creative in solving problems. Make a list of approximately twenty items on the board or paper. You might include familiar objects such as a window, a toothbrush, a bed, a clock, a chair, a wheel, a calendar, a milk carton, a calculator, etc. Have students choose two or three items at random and combine these items with one another. Instruct students to write or illustrate an idea that is suggested for a new product or improvement for either of the original items. Encourage innovative solutions!

Activity 3: Alternative Problem Solving

Prior to this or the previous activity, the following basic rules for brainstorming, taken from Alex F. Osborn's book, Applied Imagination, might be discussed with students in order to encourage flexibility and the fluent

production of ideas. One might also discuss with students the fact that brainstorming is one method many businesses, social planners, and scientists utilize for solving problems and creating new ideas for the future. Your enthusiasm will be contagious as well as provide encouragement for that reluctant student to take verbal risks in this non-critical situation.

Brainstorming Guidelines

1. Criticism is ruled out. Adverse judgment of ideas must be withheld until later.

2. "Free-wheeling" is welcomed. The wilder the idea, the better; it is easier to tame down than to think up.

3. Quantity is wanted. The greater the number of ideas, the more likelihood of useful ideas.

4. Combination and improvement are sought. In addition to contributing ideas of their own, participants should suggest how ideas of others can be turned into better ideas; or how two or more ideas can be joined into still another idea.

Idea-spurring questions, such as the following, can also help a student gain flexibility and fluency in generating ideas: Substitute? Combine? Adapt? Minify? Modify? Magnify? Put to other uses? Eliminate? Reverse? Rearrange?

Following a brainstorming session, students should evaluate the ideas, selecting those which would appear to have potential for implementation. Students then might wish to do further exploration and research on a selected idea(s) in order to verbally or visually demonstrate a new invention or a creative solution to a challenge of the future.

The sample problems or "challenges" which follow will encourage students to examine what is available or being done today, and then to consider if the ideas being implemented today are, in the short or long run, creating even greater problems for our future. An example might be the automobile, which helped to solve a problem of transportation, but created problems of fuel needs, pollution, accidents, traffic conjestions, etc. The book, Future Shock by Alvin Toffler, provides excellent source material concerning biological, societal and technological ideas and events projected for our future.

Sample Challenges for Brainstorming

A. Challenge: Develop ideas for a new source of power, for transportation and heat. The energy source should be non-polluting, and be easily attainable at low cost.

B. Challenge: List new or improved uses of the oceans.

C. Challenge: Develop ideas for edible food containers which are low in cost and acceptable to consumers.

D. Challenge: Develop ideas for new and improved building materials.

E. Challenge: List ideas for redesigning United States currency.

F. Challenge: List inventions which the world could use to advantage but which have not yet been invented.

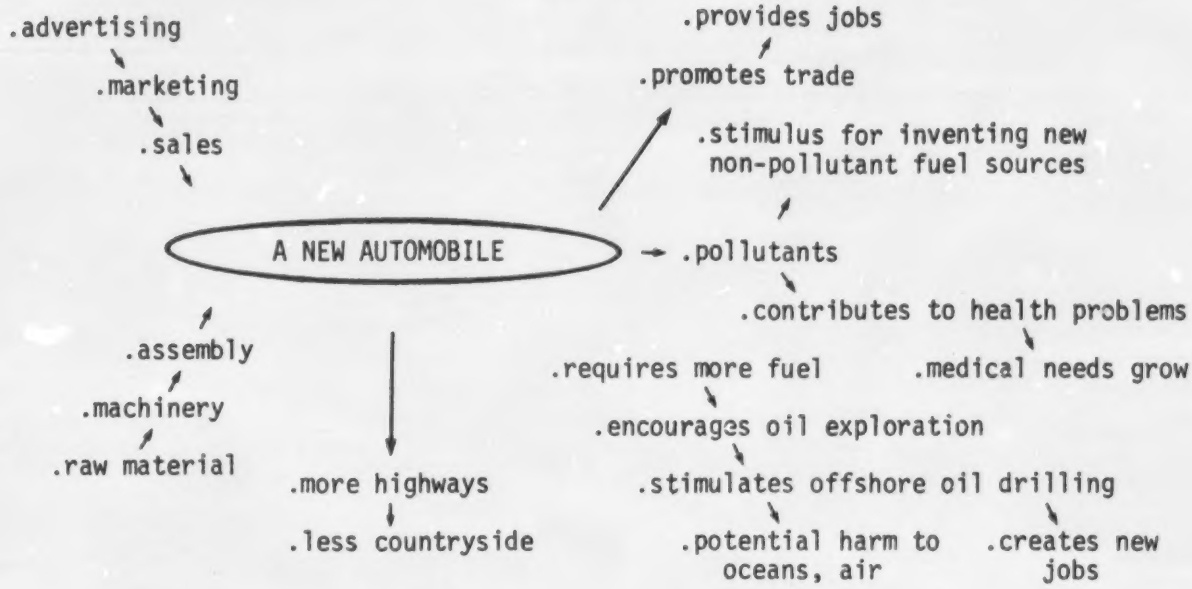
Activity 4: Alternative Solutions

This activity can be readily adapted to the language arts, social studies and values clarification sessions in order to encourage students to recall factual information (What Is, Level 1); to progress to a more abstract, imaginative thinking level (What Could Be, Level 2); and finally, (What Might Happen If----------, Level 3) or what might the consequence be if Level 2 ideas are pursued. This activity encourages one to examine options, to visualize what the possible short and long range effects might be of a prior decision or lack of decision. A simple illustration of this activity for primary grades might begin with the reading of a story such as "The Boy Who Cried Wolf." The chart illustrates what might have happened to the shepherd boy had he been engaged in alternative activities rather than playing jokes. This activity can be readily adapted to a student's own creative writings in deriving different outcomes, as well as examining alternatives to subject areas such as transportation, energy resources, population, alternative food sources, environmental issues, etc.

Level 1	Level 2	Level 3	
Factual	Alternatives	Consequences	
What is or What Happened	What Could Be	What Might Happen If--	
		Short Range	Long Range

Activity 5: Multi-Causal Chart

This activity adapted from Essence, examines possible causes and effects of a commonplace situation and how events or changes in one area of the environment affect other areas.



The class can be divided into small groups to develop a similar chart and/or to discuss (a) problems that will be solved and (b) new problems the event or object might create. Each group can choose a chairman and a recorder in order to report group findings to the class. The book Future Shock by Alvin Toffler provides excellent source material concerning biological, societal and technological ideas and events projected for our future.

Activity 6: Life Line

Students are asked to take two sheets of paper and draw a line to represent birth to the present; and the present to the year 2025. The lines can be curved, jagged or slanted in order to reflect significant events in the past and anticipated events in the future. Events might include birth of siblings, travel, friends, education, awards, hobbies, careers, health and global events affecting one's future. This activity can be followed by having students write an autobiography or a biography that will be written about them in the year 2025.

Activity 7: 21st Century Invention

Divide students into groups of three or four and present each group with a bag containing about ten to twelve small household or "junk" items such as string, tin foil, paper cups, plates, thread spools, film cans, cardboard, tape, etc.

Have students devise a useful 21st century invention, using all of the given items. Students should be prepared to explain and justify the usefulness of this new invention.

CREATING ALTERNATIVE VISIONS

Raising a student's consciousness concerning the future is indeed a present goal for education. The above activities and the ones that follow, provide a few introductory suggestions, adapted from many sources, for developing the awareness of one's ability to responsibility affect his future. The bibliography provides excellent reading as well as suggestions for the more familiar, in-depth future strategies such as projection and survey techniques, constructing an impact matrix writing, scenarios, trend charting, simulations and gaming, creative writing and dramatic activities.

The following activities can serve as stimulators for individual or small group projects and for devising other activities. The exercises can be combined and altered to meet the particular student's needs. Detailed explanations are unnecessary as the "openness" of the activities will encourage greater opportunity for problem solving and inventiveness.

1. Write four headlines for the year you reach 35 years of age. Write news article for one of these headlines.

2. Illustrate and describe the device which will take you to work at age 45.

3. Describe at least six potential uses of the computer. List advantages and disadvantages for at least two of these uses.

4. Write a short science fiction story about life on a space station, a lunar installation or inter-planetary travel.

5. Where will you be fifty years from now? Write a brief description of what you envision you will be doing and where you will be on the following dates: 1986, 1996, 2000, 2016, 2026.

6. Create a new labor-saving device describing and illustrating its use. List the advantages and disadvantages.

7. Design a rapid transit system to be used in your area in the year 2000.

8. Build a hypothetical community in the classroom for the year 2000.

9. Write, tape record and/or photograph a 60-120 second commercial promoting futures study.

10. Examine present architectural designs in housing and building. Conduct an interview with an architect concerning new building materials, present restrictions which prohibit innovative designs and use of these new materials. Design a model home or building for the year 2000 utilizing new materials and innovative designs.

11. Write or interview a state legislator or your congressman concerning present State and Federal land use legislation. Create a local hypothetical land use map providing land for recreation, industry, public and private services, transportation, etc.

12. Write and dramatize a play dealing with a futuristic situation.

13. Design a museum of the future which would be an addition to the community's present historical museum.

14. Create and display posters dealing with various futuristic themes.

15. Collect articles from the newspaper and magazines that foretell of future discoveries and inventions: foods, medicine, electronics, education, transportation, etc. Explain how the projection or invention will affect your life.

16. Conduct student, parent and/or neighborhood surveys on various topics such as:

    1. Should we limit uses of natural resources?
    2. Should we sacrifice present traditions and life styles for future growth?
    3. Expectations for the future.

17. Write a scenario (a narrative describing a sequence of events that might occur in future) describing the effects of computers and robots/humanoids on the home and family.

18. Design a human being of the future. Body parts should reflect your projections for artificial, genetic and environmental changes. For example; if intelligence increases, the head might be larger than the present size.

19. Design a model, draw and/or write a description of a city that is underwater, underground, doomed, or in a skyscraper. Show where people work, live, shop, and how they move from place to place.

20. Research one or more inventors and their inventions. Discuss and/or illustrate the impact this invention has had on our society and the world.

CONCLUSION

Raising a student's consciousness concerning the future and global interdependence is indeed a present goal for education. The above activities provide a few introductory suggestions, adapted from many sources, for developing the awareness of one's ability to responsibly affect his future. The bibliography provides excellent reading as well as suggestions for the more familiar, in-depth future strategies, such as projection and survey techniques, constructing an impact matrix, writing scenarios, trend charting, simulations and gaming, creative writing and dramatic activities.

Because we are dealing with unknowns, the subject of Futures in necessarily less concrete, more exploratory. A problem solving approach to this study provides a vital and exciting learning incentive to the students and the teacher for exploring, creating and designing a more desirable future from among examined alternatives.

The seeming ambiguity and open-endedness of the exercises allow the freedom for students and teachers to discover for themselves the alternatives and relationships of ideas and issues. Most of the suggested activities require no materials, just a "mind set" and a willingness to explore.

The Norfolk City School students, involved in this Future study, have been "turned on" now to the world in which they will be living. They have experienced joy in learning, having been involved in problem solving and the decision making process with a subject area which is most relevant to their lives tomorrow.

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EVALUATING PROGRAMS FOR THE GIFTED: SOME PROBLEMS AND PROCEDURES

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Evaluating Programs for the Gifted: Some Problems and Procedures*

Did it do any good?
Was it worth the time and effort?
Was it worth the money?
It it working as we expected?
Is this approach better than some other method?

These are questions that are being asked with increased frequency as schools pursue what sometimes seems to be the impossible dream of providing each student with the very best possible learning environment for his or her particular needs.

The purpose of this article is twofold. First, we would like to point out some of the relatively unique characteristics of programs for the gifted. These characteristics require that special considerations be taken into account in the process of developing evaluative studies that are designed to assess particular objectives and populations. The second purpose is to present an overview of a model that hopefully will provide some practical guidance in designing evaluative studies. The model has been developed in such a way that it requires the evaluator to be responsive to the needs of the consumer rather than the self-serving interests that sometimes underlie evaluation studies.

Any model or set of guidelines will quite obviously reflect certain points-of-view on the part of the writers. As far as programs for the gifted are concerned, we are not strong advocates of the traditional pretest/post-test approach to evaluation. Nor do we believe that the rigid behavioral-objectives approach is especially appropriate for evaluating programs that focus on higher level objectives. These approaches have placed too much emphasis on evaluating students rather than the programs that should be serving students. Program evaluation is a broad concept that embraces many kinds of information. If we restrict our activities to test score analysis only, we may be guilty of judging the consumer rather than the service that has been provided to him or her.

For reasons that will be pointed out in the sections that follow, we firmly believe that people in gifted education must take the lead in breaking down the let's-give-a-lot-of tests mentality that has characterized (and plagued, in many cases) the field of evaluation for many years. The "accountability boys" are trying to force rigid models on programs that are straining to be free and open; and when this happens, the tail ends up wagging the dog. The role of evaluation is to serve programs rather than to force them, however subtly, into being convenient vehicles for the evaluator's bag of tricks.

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* This article is a summary of selected chapters from A Guidebook for Evaluating Programs for the Gifted and Talented. Ventura, California: Office of the Superintendent of Schools, 1975, 227 pp.

A second bias is that regardless of who hires and pays the evaluator, he must have the best interests of the consumer (student) at heart--he must view himself as an evaluator for the people rather than for the institution that provides the services to people. While we cannot be politically naive in designing evaluation studies, we also should never forget that an honest evaluation is impossible unless the best interests of the consumer are first and foremost in our minds.

Special Problems in Evaluating Programs for the Gifted and Talented

The Problem of "Higher Level" Objectives

Programs for the gifted are often characterized by a commitment to the development of higher powers of mind and advanced levels of awareness, interest, and other affective behaviors. This presents a somewhat unique problem for the evaluator because these objectives cannot be measured as easily and precisely as those objectives which deal mainly with the acquisition of basic skills. As we move up the scale of learning behaviors, from the simple acquisition of knowledge to the development of higher mental processes, it becomes increasingly difficult to find measuring instruments that meet the scientific and practical requirements necessary for good evaluation studies.

A second dimension of this problem is that gifted programs are frequently characterized by highly individualized objectives for each student. Whereas a reading skills program for average or slow learners may have enough uniformity in its objectives to warrant large scale standardized testing, a program for gifted students may have many different objectives for each student. Standardized tests can, of course, be effectively used in evaluating programs for the gifted if they (a) are valid (appropriate) measures of particular objectives, and (b) if they are used in situations where reasonable levels of reliability can be obtained. But when a teacher devises individualized objectives for each child, we must seriously question the appropriateness of tests based on systemwide or nationwide objectives.

In recent years there has been a great deal of concern in education about the specification of objectives in terms of observable and measurable student behaviors. Many evaluators have looked upon the "behavioral objectives model" as a panacea for conducting evaluation studies. However, the nature of gifted programs and their concern for developing higher thought processes may make this model too cumbersome to be practically applied to programs for the gifted and talented. In fact, when the behavioral objectives approach is used in its most rigid form, it may even force program developers to focus their attention on the trivial rather than important behaviors of superior learners.

The rigid behavioral objectives model is inappropriate for programs for the gifted because it forces us to be primarily concerned with those behaviors that are easily measured. Although many experts in the testing business believe that complex objectives can be evaluated, Robert Stake, one of America's foremost authorities on evaluation (Stake, 1973, p. 199), has suggested that the

total cost of measuring such objectives may be one hundred times that of administering a forty-five minute standardized paper-and-pencil test; and the amount of time, personnel, and facilities necessary for such evaluation may be astronomical. Stake also points out (Stake, 1973, pp. 196-199) that the errors of testing increase markedly when we move from highly specific areas of performance to items which attempt to measure higher mental processes and unreached human potential.

Measurement and Statistical Problems

Measurement and formal testing often play a major role in evaluation studies, but certain cautions are necessary when we consider the use of standardized tests in evaluating programs for the gifted. By definition the gifted student initially scores at the upper end of the normal curve where it is much more difficult to show an increase in percentile score points. The same is true for age and grade scores. Generally, there is a slowing down of gains at the upper levels of most performance tests that were normed on the general population. For this reason, when the evaluator uses standardized tests, he should avoid making comparisons between gifted students and other populations. This can be done by developing separate sets of norms for each distinct population whose growth is being evaluated, provided of course, that the test has a broad enough range to allow students to show maximum growth. If a test does not have enough "top" in it, highly able students may score at the upper limits, but we will be unable to determine their true growth because of the low ceiling of the test. Since many standardized tests are designed to provide achievement information for the vast middle ranges of ability, their content and interpretive data may not be valid for children who deviate markedly upward from the mean.

The use of conventional tests with gifted and talented students also presents some problems in the statistical treatment of evaluative data. One such problem relates to the fact that test reliability is a function of group diversity--the more heterogeneous the group the higher the reliability. When dealing with a relatively homogeneous group of students, we should be extremely cautious when viewing the reported reliabilities of standardized tests. Unfortunately, most test publishers do not report reliabilities for subpopulations within their standardization sample and, therefore, it may be necessary to conduct a "local" reliability study whenever conventional tests are used with special populations.

Another major statistical problem encountered when working with the test scores of superior students is the well-known "regression toward the mean" effect. Simply stated, this means that predicted scores tend to "move in" toward the mean of the distribution. Thus, if we are using a pretest and post-test design to evaluate the effects of a program for the gifted, and if the students' scores on the pretest are initially high, it is quite likely their post-test scores will actually decrease due to the regression effect. It is for this reason the evaluator must exercise a great deal of caution when considering the pre/post design and other statistical designs that do not take into account the lack of normality in the distribution of gifted students' test scores.

Practical Problems

The evaluation of programs for the gifted, like evaluation in all other areas, requires time, money, and trained personnel. When evaluation is "tacked on" to a program as an afterthought, and when the human and financial resources necessary for carrying out a comprehensive evaluation are not available, the evaluator may very well end up being asked to do the impossible. Even when time and resources are available, the evaluator is frequently called upon to develop a plan of evaluation for programs with poorly defined objectives and a very limited conception about what will constitute a successful program.

What can be done about practical problems in evaluation such as time, money, and personnel?

Almost all writers in the field of evaluation have stressed the importance of involving the evaluator from the very beginning of any educational endeavor. Through such involvement, the evaluator can continually bring to the attention of program developers the steps that must be taken and the resources that must be allocated if evaluation is to serve useful purposes. Early and continuous involvement on the part of the evaluator will help to overcome many of the difficulties that arise when evaluation is tacked-on as an afterthought.

Another practical problem relates to the attitude that many educators hold toward evaluation. Teachers and other professional personnel often view evaluation as a means of controlling or checking up on a program and the persons responsible for operating a program. In short, evaluation can be a very threatening affair that might result in some rather harsh actions, especially if the evaluation is mandated by a decision-making body or outside funding agency.

The evaluator must walk a very thin line in the process of gaining the acceptance and cooperation of persons over whom he may eventually have to pass judgment. An evaluator who trades friendly relations with professionals for a primary concern for students may end up losing some of the "clout" that is necessary to bring about program improvement. In spite of all of the rhetoric about friendly and cooperative relations between evaluator and staff, the fact remains that the evaluator may sometimes have to recommend actions or changes unpleasant to the persons who sponsor and operate a program. This problem can be minimized by spelling out the responsibilities of the evaluator and the staff at the very beginning of an evaluation study.

By way of summary, this section has dealt with <u>some</u> of the problems that might be encountered in evaluating programs for the gifted and talented. Although some of the problems are difficult to overcome, an awareness of their existence should help the evaluator to avoid falling into the traps that typically plague evaluation studies in this area of special education.

The Key Features Evaluation System

The remainder of this article presents a step-by-step procedure for developing an evaluation plan. An overview of this design, which is called the Key Features Evaluation System is presented in Figure I. This system

consists of four sequential steps or phases. The purpose of these steps and the specific activities or procedures involved in each are described in the narrative that follows:

Step 1: Front-End Analysis

The purpose of Front-End Analysis is to help the evaluator identify "Key Features" in programs for the gifted and talented. Key Features may be thought of as major factors or variables that contribute to the effectiveness of a program. Before an evaluator can begin to select instruments and gather data it is important to determine which factors influence the program's operation and contribute most to an understanding of it. It is also important to learn what types of information are of major concern to various "Prime Interest Groups." Prime Interest Groups consist of people who have a direct or indirect interest in the program being evaluated. These groups will almost always include students, parents, teachers, administrators, and school board members. But, depending on the nature of the program, Prime Interest Groups may also include persons who are involved in the program indirectly.

As noted in Figure 1, the evaluator can identify Key Features by compiling "input" information from four main sources, the first of which is a comprehensive review of all written material relating to the program. These documents should provide the evaluator with an overview of program objectives and a description of the programs' general mode of operation.

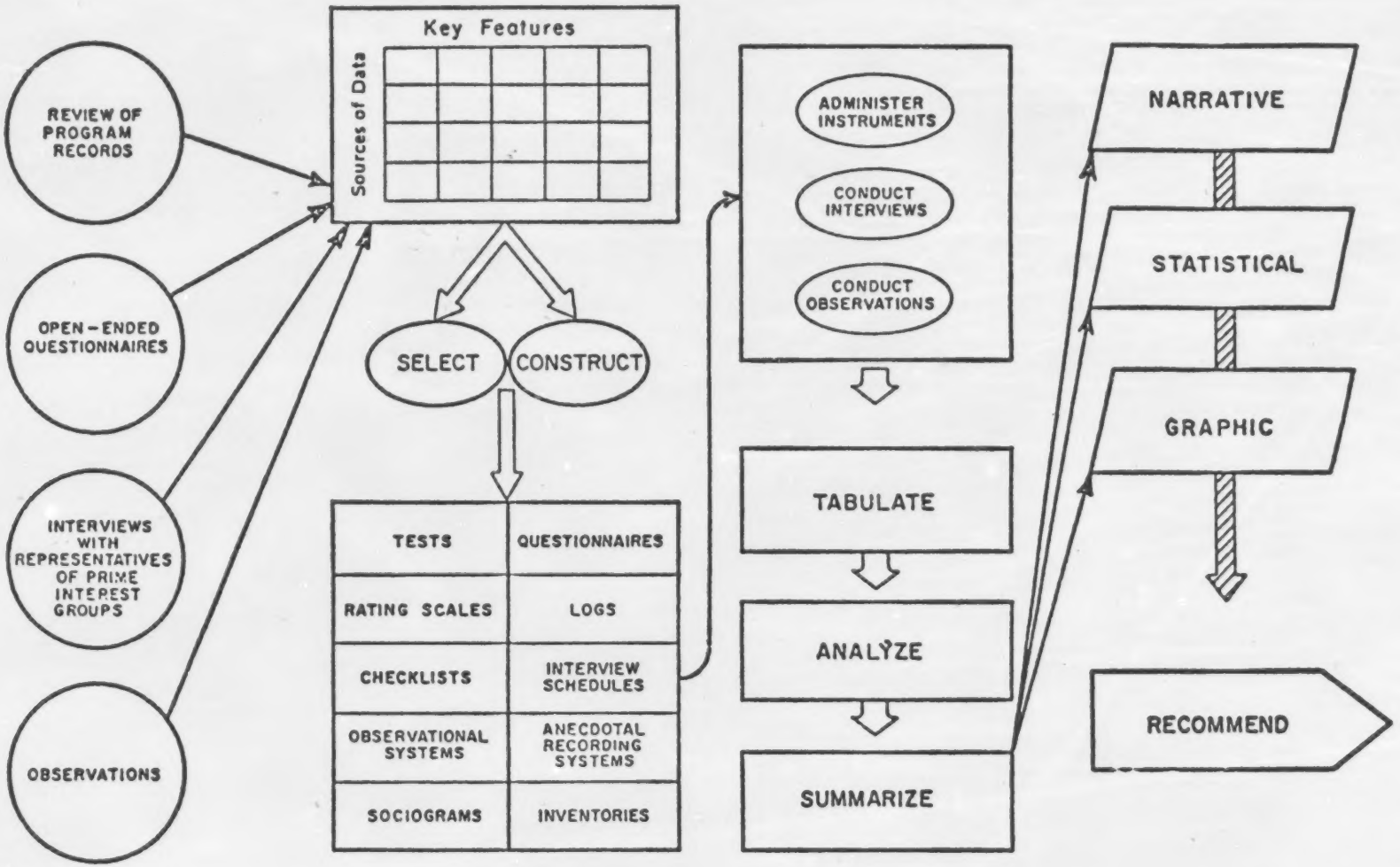
As a second source of information, the evaluator can design and administer open-ended questionnaires. These questionnaires should be completed by a representative sample of each Prime Interest Group and should enable the respondents to describe their main concerns about the program. Respondents may simply be asked, for example, to list the major questions that they would like to have answered by the evaluation report.

Knowledge gained from reviewing program documents and the questionnaires will enable the evaluator to ask meaningful questions during the third step of Front-End Analysis: interviews with representatives of each Prime Interest Group. Interviews should begin with the director and persons who were involved in the planning phase of the program. These persons will more than likely provide an understanding of the way in which the program was ideally conceived, whereas interviews with teachers and students will probably deal more closely with the way in which the program is actually operating. In all Front-End Analysis interviews, the evaluator should essentially be asking: "How can I help you?" "What information will help to make the program better for you?" "What are the things that are bothering you?"

In the final stage of Front-End Analysis, the evaluator observes the program in operation so as to help clarify and verify some of the concerns identified through previous input procedures. This type of "reality orientation" gives a much better perspective of the-way-it-is rather than the ways in which it has been described and discussed.

Figure 1

OVERVIEW OF THE KEY FEATURES EVALUATION SYSTEM



Step II: Synthesis of Input Information and Instrument Development

At the conclusion of Front-End Analysis the evaluator should be able to list the major concerns of each Prime Interest Group. These concerns should be classified and organized according to similarities among the groups and the list which evolves should make up the Key Features upon which the evaluation will focus. Once identified, these Key Features should be listed along one dimension of a chart such as the one presented in Figure 2. The evaluator must now ask himself two questions:

1. What types of instruments and/or techniques will provide information relevant to each Key Feature?

2. From whom can this information be obtained?

The answers to these questions provide the information necessary for completing the other dimension of the chart (Sources of Data) and filling in the actual content, which consists of the instruments that will be used to gather data related to each Key Feature.

Selecting and constructing appropriate data gathering instruments is perhaps the most difficult aspect of evaluating programs for the gifted and talented. As mentioned in the previous section, standardized tests of cognitive and affective abilities may fail to yeild valid information about student growth and it may, therefore, be necessary to seek out special instruments or to construct instruments that will provide more accurate information about program effectiveness. The list of assessment devices that can be used to supplement or replace standardized evaluation tools is quite lengthy and includes such items as rating scales, checklists, interview schedules, logs, sociograms and observation techniques. It is important to point out that selection and/or development of these evaluation measures requires a strong background in tests and measurements. The field evaluator without such training should obtain the assistance of a consultant with experience in this area of specialization.

Step III: Data Collection and Analysis

After the evaluator has identified Key Features, Sources of Data, and instruments necessary for obtaining the data, he then begins the third step of the Key Features Evaluation System--data collection and analysis. Data collection requires careful and comprehensive planning so that important information will not be lost due to conflicts with school vacations, special events, or final examinations. Timing is also important in terms of how often information is gathered and how much time is required to obtain the information.

Once data related to each Key Feature are obtained, they must be broken down into component parts. There are two basic methods of data analysis open to the evaluator: logical analysis and statistical analysis. In logical analysis, information is categorized according to some common characteristic and an attempt is made to discover patterns, trends, or discrepancies that exist within each clearly discernible category. The statistical approach,

Figure 2

Matrix of Key Features and Sources of Data

Key Features

Sources of Data	Student Growth	Levels of Thinking and Classroom Conditions	Attitudes Toward Program	Identification Procedures	Etc.
Students	Pre- and Post-Tests of Creativity, Critical Thinking, etc.	*Class Activities Questionnaire* Interviews	Questionnaires Interviews (Random Sample)		
Program Teachers	Evaluation of Student Growth Forms (A Structured Anecdotal Report)	*Class Activities Questionnaire* Logs	Interviews	Time and Effort Reports Follow-up Questionnaire	
Parents			Questionnaires Interviews (Random Sample)	Follow-up Questionnaire	
Student Selection Committee (Including Records)				Time and Effort Reports Rating Scale (on Usefulness of Information) Interviews Analysis of Records	
Non-Program Teachers	Rating Scale		Questionnaires Interviews (Random Sample)	Time and Effort Reports Follow-up Questionnaire	
Consultants	Student Product Rating Form				
Building Principals and Coordinators		Questionnaires	Interviews "Problems" Log	Time and Effort Reports "Problems" Log	
Secretaries				Time and Effort Reports	

which incorporates both descriptive and inferential techniques, provides the evaluator with the means by which to summarize large sets of numerical information and to make probability statements regarding the significance of observed differences among groups. Generally speaking, the nature of the data collected will determine which type of analysis is most appropriate for answering specific evaluation questions.

Step IV: Preparing Evaluation Reports

Once data are collected and analyzed, the evaluator is ready to prepare a final report. The report should begin with an introductory chapter that contains a description of the program and an overview of the evaluation design. Each chapter that follows should be organized around one Key Feature. The Data Collection methods and techniques for data analysis should be described, followed by the results as they relate to each Activity Being Evaluated. Statistical information should always be described in narrative form and each chapter should end with a brief summary that highlights the major conclusions derived from the results. The final chapter of the report should contain a general summary of the entire evaluation, highlights of the strengths of the program and areas that are in need of improvement, and recommendations that seem warranted by the findings.

Concluding Remarks

All too often, evaluations have been launched as last-ditch efforts to save programs that are in danger of being elinimated or sharply reduced in the amount of support they receive from sponsoring agencies. Although a hastily conducted evaluation may be better than no evaluation at all, the best weapon in the battle for program support and survival is a carefully planned and comprehensive evaluation that will accurately document all aspects of the services being provided for gifted and talented youngsters. Evaluation should be an essential and ongoing part of total programming and each step of the planning and development phases of a program for the gifted should give careful attention to the ways in which evaluative information can be gathered, organized and presented to decision-making individuals or groups.

Finally, evaluation is basically a simple process that need not be shrouded in complicated language, statistics, or the jargon of psychometrics. When we blow away the nostalgic dust that surrounds the evaluation mystique, we find an essentially logical process that should not be over-elaborated upon, nor should it be an end in and of itself. People usually raise simple, straightforward questions and the evaluation should attempt to provide simple, straightforward answers.

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MIDDLE SCHOOL CENTERS FOR THE GIFTED/TALENTED - A PLACE TO BE

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Teacher of Talented and Gifted
Varina High School

Henrico County Schools
Highland Springs, Virginia

The successful implementation of a program for gifted/talented students requires close attention to four factors: an efficient organizational plan, a sound curricular design, an effective communications network, and the utilization of resources. Only when all four factors are carefully blended can the program provide a favorable climate for differentiated education for the gifted.

Organizational Plan

The organizational pattern to be adopted depends upon the needs of the system, budgetary considerations, available physical facilities, and administrative commitment. A year of planning preceded the implementation of a middle school program for gifted/talented in Henrico County.

The planning year was spent researching the literature, examining existing programs, and gathering input from students, teachers, and administrators. The final proposal called for a center to be established in each of the six middle schools staffed by one teacher and an aide. The physical facilities would vary in size according to space available in each school.

The screening procedure was set up with local in-school screening committees and a county review committee. The scheduling of students, budget allocations, staffing, etc. were incorporated into the county-wide plan. Each local school then implemented a program within the framework of the total plan.

Curriculum Design

The curriculum design took shape following the staffing for each center. The six TAG teachers were recruited from within the system. Since no formal training had been available, the staff development component became a crucial factor. The summer preceding the first year of the program was spent researching, reading, attending workshops, and finally developing the instructional program.

The final curriculum model adopted by the six teachers at the end of the first year was based on Dr. Joseph Renzulli's Enrichment Triad. The taxonomies of Bloom and Guilford were incorporated into all activities and units. The model provides a means of insuring that higher level thinking processes are being emphasized and reinforced.

Communication

Perhaps the most important factor in the implementation of an effective TAG program is communication. By the end of the first year it became evident that unless parents, classroom teachers, and administrators were fully informed as to the rationale behind differentiated education for the gifted, the best of efforts would be to no avail.

A formal evaluation of the program carried out by the department of research indicated that, although much information had been given out, there was still a need for clarifying program goals and purposes. Therefore, techniques

and strategies were designed to further integrate the TAG program into the total school program. A two-way communications system was developed through the following activities:

1. Parents

    a. Informational meetings
    b. Open house meetings
    c. Newsletters
    d. Classes for parents
    e. Parent advisory committees
    f. Parent-teacher conferences
    g. Circulation of articles and books

2. Classroom Teachers and Administrators

    a. In-school screening committees
    b. Referral and placement review system
    c. Scheduling regular classes into centers for special activities
    d. Workshops dealing with curricular activities
    e. Newsletters
    f. Open house days in the center
    g. Conferences concerning student progress

3. Administrators

    a. Involvement in planning
    b. Workshops
    c. Newsletters
    d. Classroom observations

4. Students

    a. Informational meetings
    b. Self-evaluation
    c. Input into planning

5. Community

    a. P.T.A. meetings
    b. School Board meetings
    c. Presentations to civic and professional groups

Utilization of Resources

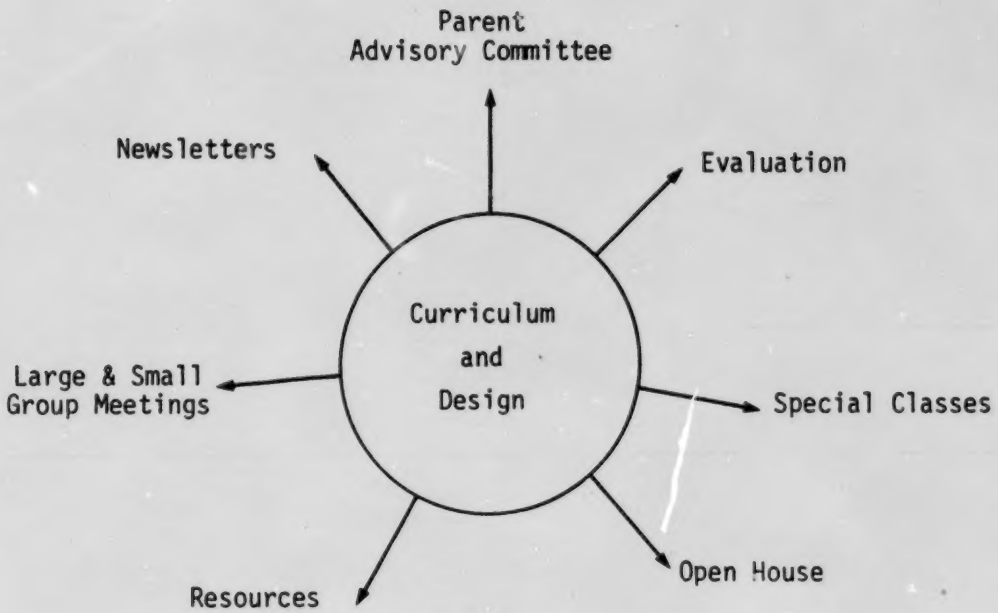
The fourth factor which determines the effectiveness of a TAG program is the utilization of resources. In a TAG center is to be a "place to BE" all available resources must be explored and utilized. This also is a two-way flow. TAG teachers and students serve as resources while at the same time they tap the potential of the school and community.

HENRICO COUNTY MIDDLE SCHOOL TAG PROGRAM

Parent Involvement - A Key Ingredient

In educating the gifted and talented, a proper and differentiated curriculum is no doubt the main concern of all educators. However, a lack of complete and appropriate communication with parents of these students could result in a less than successful program.

There are a variety of techniques which Henrico County has used to involve parents in the program for gifted and talented students. These techniques are aimed at communicating both the curriculum and design of the program.



1. Resources Utilized by the TAG Center

   a. Parents - meet with special interest groups, chaperone field trips, share hobbies, serve as contact persons.

   b. Teachers - work with special interest groups, locate speakers for TAG teachers, assist in area of expertise.

   c. Administrators - meet with special interest groups, provide facilities for meetings, schedule field trips, support activities.

   d. Business Community - serve as mentors, meet with special interest groups, open up facilities for field trips, provide research information.

   e. Professional persons - serve as mentors, speak to groups of students, evaluate student activities.

   f. Cultural and Educational Institutions - provide opportunities for field trips, interviews, open up facilities, provide information for TAG teachers.

2. The TAG Center as a Resource

   a. TAG teachers teach units in regular classes.

   b. TAG teachers provide activities and materials for classroom teachers.

   c. TAG teachers work cooperatively with teachers to help certain students.

   d. TAG teachers organize workshops in subject areas to enable teachers to reinforce center activities.

   e. TAG students tutor other students in math, reading and language arts utilizing computer terminals.

   f. TAG students share projects, research, etc. in the regular classes.

Continuing attention to the factors outlined above has resulted in a more positive acceptance of the TAG program. Classroom teachers have become more supportive of the program and are providing additional opportunities for TAG student participation in field trips, special seminars, and other activities. This support and encouragement is necessary to bring about the understanding that

> "A TAG Center is more than a physical 'place'. It is an environment created to foster a realization of potential. It is a climate conducive to active learning, exploring, and producing. It is an opening up of opportunities for higher level thinking and doing. It is a program firmly committed to differentiated education for the gifted and talented. In short, a TAG Center is a place to BE."

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RESOURCE PERSON INFORMATION FORM

Name_____

Phone Number_____

Address (Home or Business)_____

_____

Area of Expertise_____

_____

Summary of Presentation_____

_____

_____

_____

_____

_____

_____

Evaluation of Presentation_____

_____

_____

_____

_____

_____

_____

Would you recommend this person? _____ yes _____no

Level of Interest

6_____ 7_____ 8_____ All_____

Would this person be available for other presentations?

FIELD TRIP INFORMATION FORM

Place_____

Address_____

_____

Person(s) Contacted_____

_____

_____

Phone Number_____

Purpose of Visit_____

_____

_____

_____

_____

_____

_____

Evaluation of Visit_____

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_____

_____

_____

_____

Number of Students Accommodated_____

CHOICES FOR CHILDREN:
THE GIFTED CHILD IN THE REGULAR CLASSROOM

Roxanne H. Cramer

Teacher, Grade Four

and

School-based Gifted and Talented Program

Haycock School

Fairfax County Public Schools

Fairfax, Virginia

It may be because your school system doesn't make special provisions for the gifted child; or because the child missed by a couple of IQ points the ordained cut-off point for inclusion in a gifted program; or because he came into your class in the middle of the school year; or because his parents have chosen to keep him in the regular classroom. Whatever the reasons, you have had some highly intelligent students in your classes. It is now generally agreed that such students need a differentiated school experience. This can be provided within the confines of the regular classroom - possibly your classroom.

Faced with a number of such students in my third and fourth grade classes, I have devised or adapted several strategies for meeting their needs. I would like to share them with you.

My "working philosophy" with regard particularly to intellectually gifted students is this:

- Accelerate in the skill areas; i.e., math computation, spelling, reading. These students should be allowed to proceed as rapidly as they are capable through the acquisition of basic skills.

- Enrich in the content areas. Experiences should be provided that involve concept development and growth, as well as in-depth study.

- Encourage students to make choices and to initiate learning. "Self-initiated learning which involves the whole person of the learner - feelings as well as intellect - is the most lasting and pervasive." (Carl Rogers.)

I have implemented this "philosophy" in several ways: through regular classroom activities, through the use of learning contracts, through RPRT activities (being in the Right Place at the Right Time), and through Self-Directed Learning.

Regular Classroom Activities:

Within the scope of the mandated curriculum there is much flexibility which can allow brighter students to delve deeper into the content areas or proceed more quickly in the skill areas. For example, Social Studies is a content area that lends itself well to enrichment experiences. In the study of Virginia History students were able to pursue their interest in the Colonial period through the research they did for five puppet plays. The students researched and wrote the plays, made authentically dressed hand puppets, designed and painted the scenery, and made or scrounged the necessary props. The plays were presented to their parents and to other fourth grade classes in the school. A parent arranged for the puppets to be on exhibit at the National Puppet Center (now The Puppet Theater) in Alexandria. The local Northern Virginia television station sent a crew to film one of the plays and interview some of the students.

Later on, the class put on an Old Fashioned Crafts Fair, again for their parents and other students, in conjunction with a unit of study on Fairfax County. Each student made at least one item for the fair, and many chose to make two or three.

One student turned out to be an avid Civil War buff. He eventually read every book in the school library on the subject, and went on to the local public library, reading most of their collection too. He proved to be a wealth of information during the study of that period, not only for dates and trivia, but for pre- and post-Civil War background. He truly enjoyed his role of resource person for students' questions. And I never detected any resentment on their part - in fact, they seemed to think it was "neat" that a student could be in the role of a teacher, and even know some things the teacher didn't!

The Civil War buff is now writing his own book on Civil War battles. He and three other students thought that they would like to try writing books rather than doing the short regularly assigned compositions. They worked on the books not only during composition but at many other times during the week. Writing is another area where enrichment is particularly appropriate, as evidenced by the enthusiasm of the four authors as they worked on their books. Besides the Civil War book, a girl extended one of her best compositions into a short book, and two boys collaborated on an adventure story. A number of students contributed to two books which were given to the library. One was descriptions of life in early Jamestown as seen through the eyes of Colonial children. The other was a compilation of fanciful stories told by various objects in the classroom - dialogue between a desk and chair, the clock's story, an argument between the sink and the drinking fountain, how it feels to be a bulletin board, and so on.

Spelling is, I feel, a talent, almost like musical talent: some students have a lot of it and some don't. The individualized spelling program allows the able spellers to proceed at their own rate. Each student in the class compiles his own spelling list from words misspelled in all written work: compositions, science experiments, tests, reports, letters, etc. Those for whom spelling comes easily have the choice of tackling the "demons", the 200 nasties of the English language. (Most of these words are already in their vocabularies - I make sure of that.) Their personal spelling lists then consist of any misspelled words in their written work plus Demons enough to total 20 (or more) words. Most students working on Demons have consistently chosen to have more than the required 20 words for their tests.

Math is a natural subject for acceleration. Most years, two or three students demonstrate an exceptional ability in math skills as well as concepts. They may then proceed through the grade level work more quickly and undertake work from the next grade.

Learning Contracts:

Another way in which the needs of the brighter students may be met is through the use of learning contracts. The contract, simply a weekly schedule which the students fill in, involves two things:

1. Students have the choice of when they will do certain required assignments. Some activities, such as films, tests, group instruction, etc., are done as a class, but otherwise students are free to do assignments whenever they wish during the week.

2. Students select a topic - any topic - they want to learn more about. They decide what they want to study, how much time they will spend on it, and how they will present the results.

Frequent conferences with the contract students ensure that they are on task and keeping up with regular work. Working on contract requires quite a bit of self-discipline, which not every bright student has. However, for those who can handle it, the contract is very appropriate. And sometimes I find that a student who does not have the self-discipline in October may have developed it by March. On the teacher's part, flexibility and a willingness to give the student a chance to try are important.

RPRT Activities:

Being in the Right Place at the Right Time (for lack of a better term) seems to be a separate category of activities. Some recent examples are the previously mentioned exhibit and television coverage of the Colonial puppets and plays, and violin lessons for the class. The strings teacher at school made arrangements with one of the local music stores to rent violins to the whole class for a month for only $5.00 each. Twenty of the 26 students took the opportunity (the other six eventually wishing they had). The strings teacher gave the class weekly lessons in the Suzuki method, and I followed it up with short daily practice sessions. At the end of the month we participated in the Spring Recital at school. A number of the students have continued on violin. One student in particular, whose mother majored in music and teaches piano, had never been particularly interested in music although he had the ability. The opportunity to try the violin was apparently what he needed. He persuaded his parents to buy a violin, went to summer school to study further, and advanced quickly to the Honors Orchestra in school.

Self-Directed Learning (Formerly Free-Time Learning. See Cramer, Roxanne H. "The Best Things in School Are Free." Teacher, Feb., 1974, pgs. 44-47.)

Self-Directed Learning, or SDL, is a time, usually one morning a week divided into five half-hour periods, when students have choices of learning activities to participate in, as well as choices of students they want to work with. It works this way:

- Charts are posted listing activities available. Social Studies, Science, Math, Language Arts, Arts and Crafts, and Other Activities are the categories, comprising about 80 possible choices.

- Students write eight choices, as well as the names of children they want to work with, on a form.

- I write periods 1 through 5 on each student's form. (Eight choices allow me flexibility in scheduling.) Incidentally, as the school year proceeds, I allow more and more children to do most of their own scheduling when possible.

- On SDL day, each student follows his own schedule of activities.

Activities available include the following (a partial list):

Social Studies: work on a project (ongoing), view filmstrips, listen to records, map work, globe work, make or play Social Studies games, read History or other Social Studies books.

Science: use microscope, observe classroom animals and write observations, use current ESS science kit, view filmstrips, read, work on rock or other collections.

Math: play logic and spatial games, (chess, Qubic, Mastermind), play computation games (Tuf, Fracto, Krypto), do spatial puzzles (tangrams, Hi-Q, Soma, Instant Insanity), catch up on or get ahead in class work, work on Math Lab, use Mirror Cards, use a calculator, work on coin or stamp collections.

Language Arts: write stories, poems, letters, go to the library, play language games (Scrabble, Perquacky, Boggle, RPM, Sentence Cubes, Mad Libs, student- or teacher-made homonyms games), type, use the tape recorder, write or work on plays, catch up on class work.

Arts and Crafts: paint, use chalk, teach a craft to a small group, sew (hand or machine), embroider, knit, draw, make a collage, use the wood shop, make puppets, use clay, paper craft.

Other Activities: tutor kindergarten or first grade (a regular job for about half of the class), cook or bake, have a private conversation with Mrs. Cramer, sit in the Think Tank.

SDL is particularly appropriate for the gifted child in the regular classroom in that it includes all of the tenets of the working philosophy discussed at the beginning of this paper - acceleration, enrichment, choice and student-initiated learning. In addition, SDL helps to foster self-discipline as well as intrinsic motivation in the student.

Meeting the needs of the intellectually gifted child in the aforementioned ways involves planning, organization, flexibility, and a willingness to "let go" a bit. It also frankly involves more work. But I find that the positive response from students as well as their parents more than justifies the extra effort. And perhaps best of all, I have found that all my students benefit!

MOTIVATING THE GIFTED TO WANT TO LEARN

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Newport News, Virginia

As suggested by Garrison and Gray, an individual does not motivate others--a teacher does not motivate students (1). It is more accurate to say that an individual provides conditions under which others are awakened to motives they possess. Students feel motivated when they feel a need to discover for themselves (2). The teacher can create conditions in which children or young adults awaken in themselves a "need to know." According to Weir, individuals through motivation and personal choices choose the paths their interests will follow through life. Adults can select stimuli for others (such as students), but individuals will respond only to those stimuli which are important to themselves (3).

The adult can capitalize on the students' present interests to open new vistas. By introducing Great Books, puppetry, sports stories, etc., the teacher can help unlock new and potentially ongoing involvement in related areas. For example, an involvement in puppetry can lead to script writing which necessitates good grammar. An interest in sports can branch into various areas including math and journalism. A simple interest in electronics and computers can lead, under guidance, into something far-reaching.

Dr. William K. Durr, a past president of the International Reading Association, notes that students who are motivated to learn differ in significant ways from those who are motivated to complete only educational requirements. It is important that the family help set with their children realistic goals and help create conditions in the children which will help to self-motivate them to accomplishing these goals. When individuals have definite goals for which to strive, and a moderate amount of success, their self-concepts should rise accordingly. Parents and teachers can have a marked effect on the direction and intensity of motivation of gifted children.

The energy with which gifted students pursue goals is sometimes determined by how students feel about themselves. If their self-concepts are positive, they pursue goals with great enthusiasm. If individuals cannot be independent to evaluate how they are progressing toward their goals, their self-concepts may suffer. The result is the gifted person who underachieves. The use of problem solving techniques can cause individuals to be inwardly motivated. As they experience success, their self-concepts increase and the result is greater motivation.

Frequently when students associate with groups that value academic achievement, their own motivation toward academic achievement is strengthened. However, when conforming to certain mores, peers of high academic achievement sometimes value less what they learn than the models they try to emulate.

It is not certain if gifted students progress from extrinsic (outward) to intrinsic (inward or self) motivation or if they can motivate themselves more easily than the average student. However, gifted students do abstract and generalize quickly and motivation does not need to be prolonged.

If attempting to guide gifted students to self-motivation, the following suggestions may be helpful:

1. let students assume responsibilities;
2. let students evaluate what they have done;
3. avoid routine tasks;
4. give minimal direction;
5. let students use a high level of energy; and
6. let students improve their self-concepts by guiding them to success.

Learning Porcess

Taba states that gifted students need to learn by problem solving techniques (4). They need to:

1. assemble facts plus key relationships;
2. speculate about probable causes; and
3. test answers to see if they are valid.

This method is similar to the steps in any learning process:

1. stimuli;
2. input;
3. integration;
4. output; and
5. response.

The best way for gifted students to learn is not by passive learning but by active involvement. Learning by the discovery method is important because:

1. there is more active involvement by the learner;
2. the student need not be submissive;
3. higher levels of intellectual power are used; and
4. the child can learn to solve his own problems.

Gallagher is concerned with the way adults destroy the creativity and interests in children by having a prescribed method for learning. Even young children, who do not have the formal language necessary for describing what they are doing, can successfully operate on ideas by problem solving. Texts frequently stifle inward motivation and problem solving behavior by presenting information in a logical manner. Problem solving and search techniques are not encouraged or even needed.

The teacher and students need to define the problem together. The only behavior which influences learning is self discovery. Divergent and convergent thinking are both components of discovery, however divergent thinking is akin to the discovery method in that one discovery leads to another. As one focuses on the results of a discovery or solves a given problem, convergent thinking comes into play.

Summary

The learning process, in general, includes receiving, integrating and responding. Gifted students follow the learning process best by using the discovery method. The learner becomes motivated and

1. should set tentative goals;
2. direct attention to the goals;
3. engage in preliminary trials and apply previous learning--differentiate and integrate;
4. check to see if responses are correct; and
5. reach the goal.

Individuals respond to the environment that is created by oneself. Adults can motivate others (students) to strive for far-reaching goals by making use of their interests which may open new vistas to further learning.

If you are interested in obtaining an assortment of activities which may help to lead gifted students to self-motivation, please send $ .75 to:

Mrs. Martha S. Rourke
30 Garfield Drive
Newport News, Virginia 23602

Footnotes

(1) Karl C. Garrison and J. Stanley Gray, Educational Psychology (New York: Appleton-Century Crofts Inc., 1955), p. 251.

(2) T. Ernest Newland, The Gifted in Socioeducational Perspective (New Jersey: Prentice Hall, 1976), pp. 104-105.

(3) Edward C. Weir, "Choice and Creativity in Teaching and Learning," Phi Delta Kappan (June, 1962), 408-410.

(4) Hilda Taba, "Learning by Discovery: Psychological and Educational Rationale/" Elementary School Journal, 63 (1963), 308-316.

(5) James Gallagher, Teaching the Gifted Child. 2nd ed. (Boston: Allyn and Bacon, Inc., 1975), pp. 253-255.

EVALUATING VALUES CLARIFICATION
(A CLOSE LOOK AT OBJECTIVES AND EVALUATION DEVICES IN VALUES CLARIFICATION)

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I. POSITION STATEMENT:

Values clarification is an individual-oriented process of valuing, internalizing, seeking, and questioning the locus of decision-making. It advocates personal and social growth through self-directed awareness and tolerance of others' values and decisions.

If treated as a "hidden curriculum" it will trigger suspicion or even hostility in the general public. If treated as a "100-things-I-love-to-do-syndrome" it will digress rapidly to a space-filler-and-time-killer-approach. Values clarification must set behavioral objectives on a moderate and attainable level which can be explained and justified publicly.

II. BEHAVIORAL OBJECTICES:

Moderate and attainable behavioral objectives can be summarized in three categories:

A. Humanistic values: Learning how to deal effectively and humanely with oneself and others.
B. Democratic values: Learning how to operate democratically as leaders and productive citizens in our society.
C. Personal values: Learning how to analyse and to discover one's own value system by listening to others and by defining, redefining, and refining one's feelings towards self and others.

III. SKILL DEVELOPMENT FOR EDUCATORS AND STUDENTS IN VALUES CLARIFICATION:

The following skills must be mastered by teachers and students alike:

A. In the cognitive domain:
   1. To reason and to choose freely
   2. To deal with peer pressure
   3. To choose from among many alternatives
   4. To choose with an awareness of consequences
   5. To be aware of and tolerant to different life styles
   6. To think critically
   7. To think divergently

B. In the affective domain:
   1. To identify and to acknowledge feelings as a data source in decision-making
   2. To legitimize one's intuition as a data source
   3. To focus on what one prizes and cherishes
   4. To emphasize positive feelings

C. In the active domain:
   1. To move from insight to behavioral change
   2. To encourage goal setting and task commitment
   3. To achieve motivation and purpose
   4. To master tasks, contracts, and deadlines
   5. To call out the inconsistencies between what one would like to do/become and what one is likely to do/become
   6. To pursue a course of excellence

D. In the interpersonal domain:
   1. To affirm one's choices publicly
   2. To listen empathically
   3. To resolve conflict situations and problems
   4. To ask logical and relevant questions
   5. To give logical and relevant answers
   6. To build on commonalities
   7. To focus on the positive in self and others

IV. DON'TS IN VALUES CLARIFICATION:

Teachers and students must avoid the following course(s) of action:

A. In the cognitive domain:
   1. Forced decision-making
   2. Illogic

B. In the affective domain:
   1. Dwelling on what one despises and abhors
   2. Negative labeling

C. In the active domain:
   1. Encouragement of laissez-faire, absurd thinking, and daydreaming
   2. Unrealistic thinking and over-romanticizing

D. In the interpersonal domain:
   1. Destructive criticism
   2. Grading of one's choices

V. EVALUATING VALUES CLARIFICATION SESSIONS:

Some of the devices listed below have been tested and are quite popular among creatively gifted students. They provide the necessary evaluative feedback for justifying values education in our public schools. To engage students in reasoning, constructive action, and democratic decision-making will create a "Just-Community-Program" for the talented and gifted.

The following four evaluative devices are explained to workshop participants:

A. Self Reports/Student Logs
B. Value Sheets
C. Observation Data Sheets
D. Completion Device

VI. CONCLUSION OR CONSIDERATA:

Values clarification should enhance instruction and must assist students with personal/social growth. Any attempt to reward, to punish, and/or to accept "one right answer" will lead to disaster. It is the responsibility of the teacher to synthesize knowledge with tolerance, and to tie the V.C.-approach in with subject matter and skill learning. This sophisticated approach to V.C. is essential in gifted education.

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